



FIRE & SAFETY EQUIPMENT

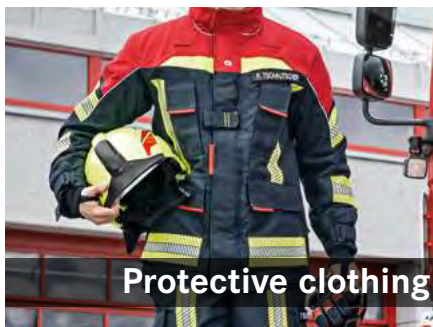
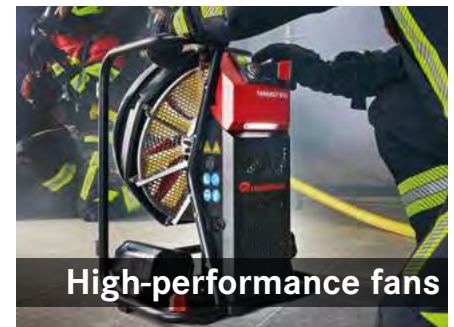




Full range of equipment.

Personal protective
equipment
from head to toe.

Technical
equipment for
your operation.



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FIREFIGHTING HELMETS

1



HEROS Titan: full shell



HEROS H30: 3/4 shell



HEROS Matrix: 3/4 shell

HEROS FIREFIGHTING HELMETS FROM ROSENBAUER

Rosenbauer has over 30 years of experience with protective helmets. The HEROS, a helmet from Rosenbauer, was introduced to the market in 1992. In 2005, this was followed by the HEROS Xtreme, the first full-shell helmet to comply with standard EN 443. The range was then expanded to include the ¾ shell helmets HEROS Smart and HEROS Matrix. In 2015 Rosenbauer set a new standard for maximum safety in firefighting operations with the HEROS Titan firefighting helmet. Based on the technology used in this, the HEROS H30, a new ¾ shell helmet, was presented in 2021.

Today, the HEROS firefighting helmets are used hundreds of thousands of times over and ensure the protection and safety of emergency crews worldwide. All HEROS helmets are produced entirely by Rosenbauer, using only Rosenbauer tools.

Features	HEROS Titan	HEROS H30	HEROS Matrix
EN 443	Yes	Yes	No
EN 16471, EN 16473	Yes	Yes	Yes
Helmet type	Type B/3b (full shell)	Type A/3b (¾ shell)	Type A/3b (¾ shell)
Size adjustment from outside	Yes	Yes	Yes
Size	49-67 (19.3-26.4")	49-67 (19.3-26.4")	51-65 (20-25.6")
Face shield per EN 14458	●	●	○
Eye protector per EN 14458	○	○	○
Neck protector	●	●	○
Edge protection	●	●	-
Helmet trims	○	○	○
Crest	○	○	○
Integrated lamp holder	●	●	●
Rear position light	-	○	-
Lamp holder as an accessory	○	○	○
Integrated thermal imaging camera	○	○	-
Mask adapter Integrated	○	○	-
Helmet headset	○	○	○
Leather interior	○	○	-
Comfort padding chin strap	●	○	○

○ optional ● standard - not available

Standards for firefighting helmets



EN 443

Sets the minimum requirements for firefighting in buildings and other structures. A key aspect of the standard is the distinction between Type A and Type B. Type A helmets only cover the upper half of the head. Type B helmets additionally provide protection for the lower half of the head. They are referred to as full helmets.



EN 14458

EN 14458 regulates eye and face protection shields and visors that are used on protective helmets.



EN 16473

EN 16473 regulates the requirements for helmets for technical rescue operations (e.g., traffic accidents, railway incidents).



EN 16471

EN 16471 regulates the requirements for helmets for forest and land firefighting.



ISO 16073

ISO 16073 regulates the minimum requirements and test methods for all personal protective equipment for forest and land firefighting.

Optional additional requirements:



Electrical isolation



Chemical resistance

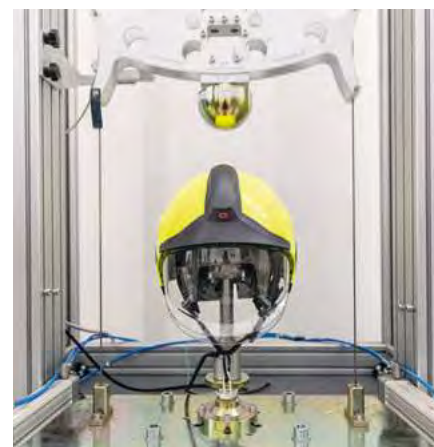
Tested according to EN 443

Radiant heat	<ul style="list-style-type: none"> 8 minutes 14 kW/m² ≥ 300 °C (572 °F) helmet temperature
Shock absorption	<ul style="list-style-type: none"> Half spherical striker 5 kg (11 lb) at 2.5 m (3.3 ft) height When heated > 300 °C (572 °F) helmet temperature Force on the head < 15 kN
Penetration resistance	<ul style="list-style-type: none"> Narrow, blade-shaped impact bolt 1 kg (2.2 lb) at 2 m (6.6 ft) height When heated > 300 °C (572 °F) helmet temperature No contact with the test head
Full flame impingement	<ul style="list-style-type: none"> Exposure to flame 1,000 °C (1,832 °F) / 10 seconds No afterflame > 5 seconds No dripping

The HEROS Titan, HEROS H30, and HEROS Smart clearly exceed all requirements of EN 443 and offer the best possible protection in all operations.



Radiant heat



Shock absorption



Penetration resistance



Full flame engulfment



Most powerful helmet lamp



0299/22

HEROS TITAN FIREFIGHTING HELMET

High-tech full-shell helmet

The HEROS Titan firefighting helmet combines maximum protection with lightness and perfect fit. Thanks to its high-tech construction and materials, it easily handles high mechanical loads and extreme temperatures.

- Extremely low weight of only approx. 1.35 kg (3 lb)
- Lightweight helmet shell with maximum stability
- Optimized center of gravity
- Many sizes from 49 (19.3") to 67 (26.4") in just one helmet shell
- Bionic design combines protection with sportiness and dynamics
- Individually adjustable in just five steps
- Disassembly of the interior fittings without tools
- Interior fittings washable at +40 °C (77 °F) to +60 °C (140 °F)
- High user and service friendliness

HEROS Titan is fully tested and certified according to EN 443, EN 16471, EN 16473 and ISO 16073

- Full protection helmet type B/3b
- CE 0299
- Additional tests: E2E3C****

E2E3	Electrical insulation
C	Contact with liquid chemicals
****	-40 °C (-40 °F)

New helmet shell, minimal weight

- Ergonomically shaped helmet shell made of high-performance polyamide
- Lightweight design with maximum stability
- Maximum wearing comfort even during long periods of use
- Highest mechanical protective properties

Optimized damping insert

- Increased protection against heat
- Even more robust in terms of penetration

Improved rotary knob

- Easy size adjustment mechanism from outside
- Better grip and improved haptics
- Effortless operation, even with gloves
- Expanded adjustment range thanks to new gearing

Integrated edge protection

- Protects the helmet from impacts, wear, and damage
- Attached directly to the helmet
- Fitted as standard

Optical Class 1 visors

- Design conforms to Optical Class 1 - the highest optical class
- Better vision and greater comfort during longer operations
- Face and eye shield certified according to EN 14458
- All visors are suitable for eyeglass wearers

Fully flexible mask adapter (optional)

- Additional setting options: up, down, forward, and back
- Suitable for all common respirator masks

Powerful helmet lamp (optional)

- 3-step luminosity adjustment
- Improved performance and lighting duration
- Flashing signal for battery change



User-friendly rotary knob



Eye and face shield of Optical Class 1



Fully flexible mask adapter



157300-555



157301-555



157304-555



157305-555



157306-555



157307-555



157308-555



157309-555



157311-555



157312-555

A perfect fit in just five steps

The interior fittings of the HEROS Titan enable simple adjustment to the individual head shape in just a few simple steps. Adjusting a firefighting helmet has never been this easy. A perfect fit is possible in just five steps:

1. Setting the wearing height

The wearing height can be adjusted in the internal fittings thanks to the headbands. The wearing height is easiest to adjust when the interior fittings are removed.

2. Headband in three widths

The headband can be adjusted on both sides to three different settings.

3. Position of the chin strap padding

The position of the chin strap padding near the ears is also adjustable.

4. Rotary knob

With the external rotary knob, the contact pressure can be adjusted to individual preferences at any time. Also easy to adjust when wearing firefighting gloves.

5. Optimized center of gravity

By shifting the helmet shell relative to the interior fittings, the helmet can be optimally aligned with the body's center of gravity.



Setting the wearing height



Optimized center of gravity



Headband in three widths



Chin strap padding

HEROS Titan with neck protector and face shield visor

Weight: approx. 1.35 kg (3 lb)

Order no.	Color
157300-555	HEROS Titan luminous
157301-555	HEROS Titan day-glow red
157304-555	HEROS Titan blue
157305-555	HEROS Titan black
157306-555	HEROS Titan white
157307-555	HEROS Titan silver
157308-555	HEROS Titan red
157309-555	HEROS Titan yellow
157311-555	HEROS Titan chrome
157312-555	HEROS Titan high-visibility yellow luminous

Options and accessories for the HEROS Titan

- 157349 HL3Ex helmet lamp**
 The lamp can be easily attached and removed again by pressing the two locking buttons on the left and right, and can thus be used as a helmet lamp or as a handheld lamp. Both removing and attaching the helmet lamp are also easy to do with firefighting gloves.
- Ex II 2 G Ex ib IIC T4 Gb (Temperature Class T4)
 - Ex II 2 D Ex ib IIIC T 135 °C (275 °F) Db
 - LED service life of up to 100,000 hours
 - Fully integrated helmet lamp, modern LED technology, extremely bright
 - Operated with three AAA batteries
 - Three different luminosities
 - Weight: approx. 0.13 kg (0.3 lb) (including batteries)



157349

Face shield
 Certified according to EN 14458. Optical Class 1 (highest class). Also suitable for eyeglass wearers.

- 157350 Transparent**, loose as a spare part
15735101 Gold, mounted onto the helmet (instead of the standard face shield visor)
157351 Gold, loose as a spare part



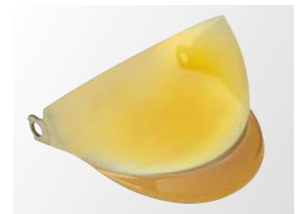
15735101

Eye protector
 Certified according to EN 14458. Optical Class 1 (highest class). Also suitable for eyeglass wearers.

- 157354 Transparent**, mounted onto the helmet
15735402 Transparent, loose as a spare part, incl. screws
15735401 Tinted (sun protection), mounted onto the helmet
15735403 Tinted (sun protection), loose as a spare part, incl. screws



157350



157351



15735402



15735403

Set of ratchet straps
 Complete (left and right). For attaching the 2-point mask adapter (adapter not included). White color.

- 156862 Mounted on to the helmet**
15686201 Loose as a spare part

Mask adapter
 For the attachment of masks with spring clips.

- 15733101 Mounted on to the helmet**
157331 Loose as a spare part



157354



15735401



156862

(Delivery without helmet and mask)



157331



157369



15736808



15736401



15736501



15736601



15736701



157364 / 15739401



1573992

Staudinger P.

15739804

Neck protector

Made of heat and flame resistant material.

- 157369** **Standard neck protector**
2-layer, loose as a spare part
- 15736901** **Standard neck protector**
3-layer, replaces the standard neck protector
- 15736904** **Standard neck protector**
3-layer, loose as a spare part
- 15736808** **Complete neck protector ("Holland")**
2-layer, loose as a spare part
- 15736801** **Complete neck protector ("Holland")**
2-layer, replaces the standard neck protector
- 15736802** **Complete neck protector ("Holland")**
3-layer, replaces the standard neck protector
- 15736804** **Complete neck protector ("Holland")**
3-layer, loose as a spare part

Helmet trims

Made from 3M Scotchlite film.

- 157364** **Color: red**, mounted onto the helmet
- 157365** **Color: silver**, mounted onto the helmet
- 157366** **Color: yellow/gold**, mounted onto the helmet
- 157367** **Color: blue**, mounted onto the helmet
- 15736401** **Color: red**, loose as a spare part
- 15736501** **Color: silver**, loose as a spare part
- 15736601** **Color: yellow/gold**, loose as a spare part
- 15736701** **Color: blue**, loose as a spare part

Customized lettering for the HEROS Titan

The lettering and color are freely selectable.

- 1573991** **Lettering in one line**, mounted onto the helmet
- 1573992** **Lettering in two lines**, mounted onto the helmet
- 15739910** **Lettering in one line**, loose as a spare part
- 15739920** **Lettering in two lines**, loose as a spare part

"FIRE SERVICE" lettering

- 15739401** **Color: red**, loose as a spare part
- 15739501** **Color: silver**, loose as a spare part
- 15739601** **Color: yellow/gold**, loose as a spare part
- 15739701** **Color: blue**, loose as a spare part

"Name" lettering

Printed on film, character height 7 mm (0.3"). Color freely selectable.

- 15739804** **Loose as a spare part**





Protective cover for extreme situations, flashover training etc.

- 157374** **Material: NOMEX®**
- 15737401** **Material: NOMEX® gold**

15736301 Universal adapter for the HEROS Titan

Enables quick and easy installation of side helmet lamps. The adapter can be mounted on the left or right of the HEROS Titan. Connection pieces for the universal adapter are available for the following helmet lamps: UK3A, Parat PX1/PX0, Fenix E05.

Adapters for various lamp models on request.

Universal adapter for installation on a helmet	Helmet lamp adapter for installation on a universal adapter
<p>15736301</p> 	<p>15736303 For UK3A</p> 
	<p>15736304 For Parat PX1/PX0</p> 
	<p>15736305 For Fenix E05</p> 

157360 Adjustment set for small head sizes

156671 Professional cleaner
40 ml (1.4 fl oz) spray bottle

Headband cover

- 15737001 Textile**, loose as a spare part
- 15737002 Leather**, loose as a spare part
- 15737003 Leather**, mounted on the helmet instead of textile

15684301 Carrying and protective bag
The carrying and protective bag enables the helmet and accessories to be transported conveniently and stored safely in the fire station. It can also be used as a wash bag for safe washing, e.g., in the washing machine.
Weight: approx. 0.2 kg (0.4 lb)

NMS mask for HEROS helmets

Mouth and nose protection system for use in technical rescue as well as forest and land firefighting. Not suitable for firefighting in buildings and other structures.

- Easy (de-)installation without having to remove the helmet
- Equipped with a replaceable filter fleece
- Washable at +40-60 °C (104-140 °F)
- Good shape and fit

Underlying regulations:

Regulation (EU) 2016/425 in connection with:

- EN 443(D)
- EN 16471 (D)
- EN 16473 (D)
- ISO 16073
- GS-PS-01

- 15736330 NMS mask for HEROS helmets**
- 15736331 Replacement filter fleece for NMS mask**, 10 pcs.
- 15736332 Headband for NMS mask, for wearing without a helmet**



15736301 / 15736305
(without lamp)



15736301



15737003



157360



15684301



15736330

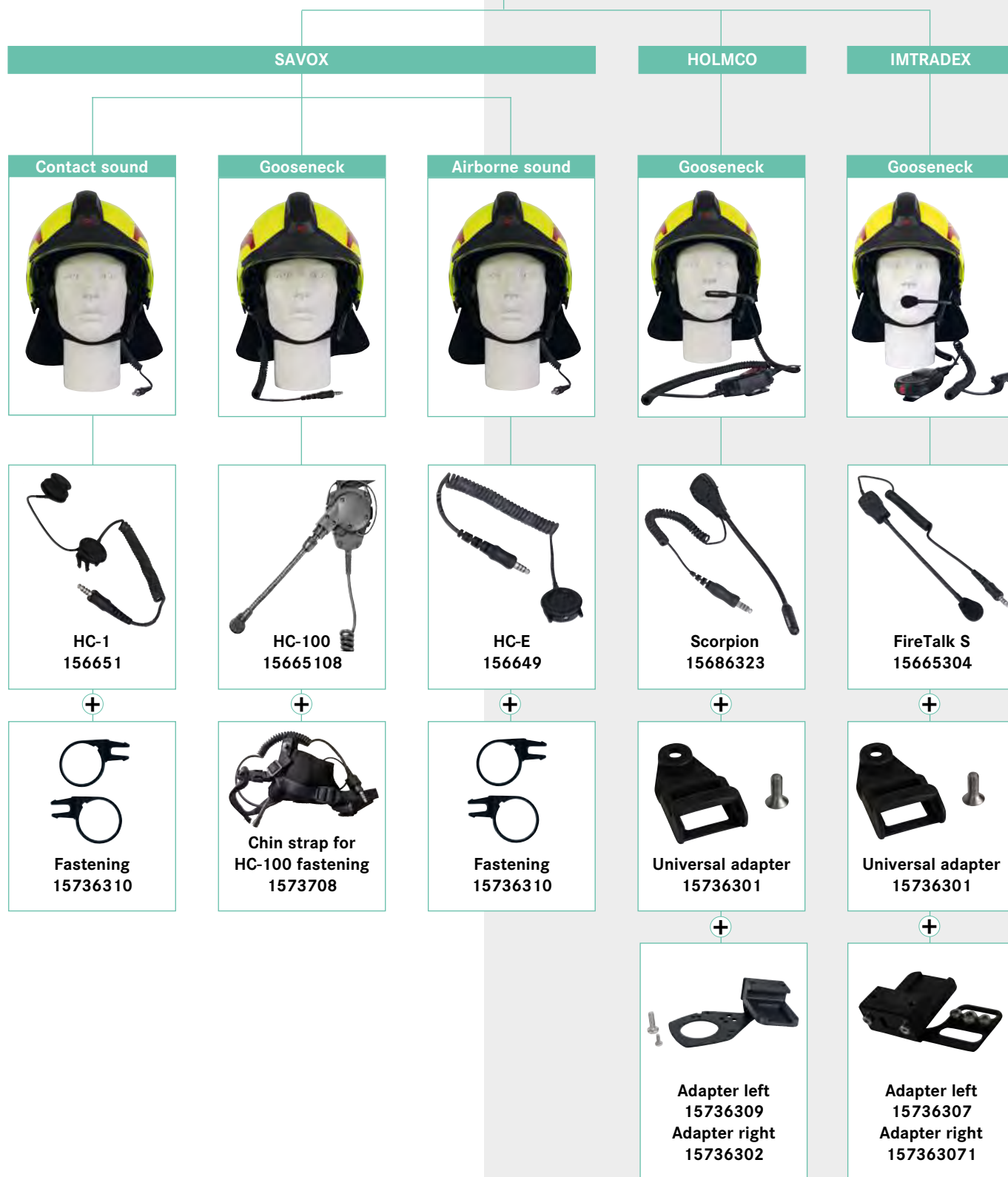


Spare parts for the HEROS Titan

No.	Part	Order no.
01	Helmet shell	15732001*
02	Front shield, black	157357
03	HL3 Ex helmet lamp	157349
04	Blind cover set (1 pair)	15733102
05	Mask adapter set (1 pair)	157331
06	Rotary knob	157361
	Gear wheel	15736001
07	Helmet band	15735902
08	Textile headband cover	15737001
08a	Leather headband cover	15737002
09	Foam headband without covering	15735903
10	Chin strap	1573707
11	Neck protector	157369
11a	Three-layer neck protector	15736901
11b	All-round neck protector	15736808
11c	All-round neck protector, three-layer	15736804
12	Mask adapters/ratchet bands	15686201
13	Face shield visor, transparent	157350
13a	Face shield, gold	157351
14	Eye protector, transparent	15735402
14a	Eye protector, tinted (sun protection)	15735403
15	Helmet trims red, doubled	15736401
15	Helmet trim silver, doubled	15736501
15	Helmet trims yellow, doubled	15736601
15	Helmet trims blue, doubled	15736701
16	Helmet lettering "FIRE SERVICE"	15739801
	Interior fittings with textile covering	157363
	Screw set for main screw connection	15736323
	Screw set for eye protector	15686311
	Screw set for chin strap	15686317
	Screw set for ratchet band	15686318

*Other colors on request

HEROS Titan helmet radio systems



PTT key required for all combinations

Attention: Must be ordered with the correct plug for the radio
(Order number depends on the respective radio device type).



FIREFIGHTING BOOTS

2



BOROS FIREFIGHTING BOOTS

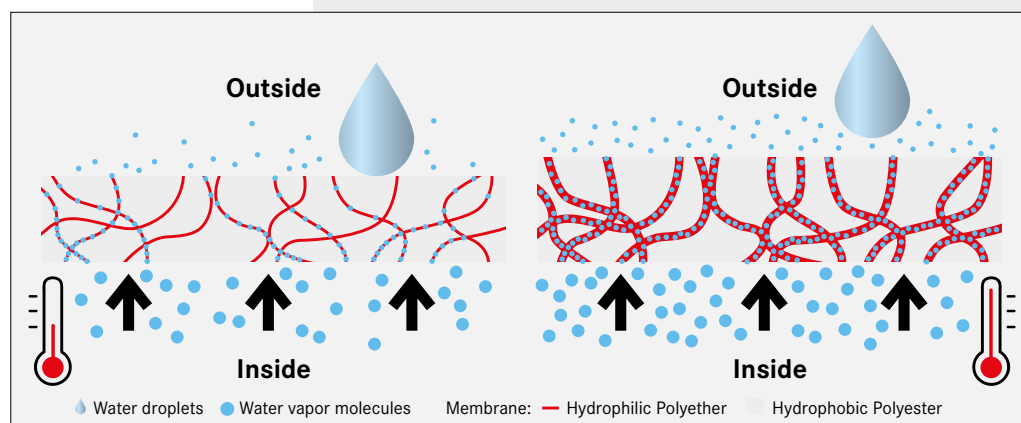
Certified according to EN 15090 F2A HI3 CI AN SRC, EN 61340-4-3 (ESD), ÖNORM Z 1259 (orthopedic insoles).

For firefighters, boots are a special item of equipment. They accompany their wearers every second of the operation and protect from cold and heat, wind and weather as well as mechanical influences. They also provide the necessary grip on a wide variety of surfaces. With the BOROS line, Rosenbauer has further developed and optimized its products in the firefighting boot segment in all aspects.

SympaTex® in the BOROS models

The SympaTex membrane is interwoven with tiny threads that swell when exposed to moisture, allowing more water vapor to be transported away from the body. The more heat is generated, the better the temperature regulation works. This is a clear argument in favour of the BOROS models - in summer as well as in winter. In addition, the membrane is extremely stretchy, adapts perfectly to the shape of the boot and retains its functional advantages in every situation.

sympatex®





The BOROS sole in detail

- **Special rubber mixture**
Michelin has developed a compound especially for firefighting that works reliably in both extreme cold and extreme heat.
- **High flexibility**
The tread blocks are interrupted by grooves, which creates more flexibility in the ball of the foot region. This supports the natural rolling movement of the foot.
- **Excellent energy absorption**
Rubber strips on the inside provide very good energy absorption, especially in the heel area.
- **Special tread**
The single tread geometry combined with ribbed surfaces ensures excellent grip even on slippery surfaces.
- **Wear indicator**
The integrated indicator shows whether the sole still has sufficient tread strength.
- **Penetration protection**
Corrosion-resistant steel penetration protection integrated into the sole.
- **Pull-off aid**
A stable edge in the heel area allows the boot to be removed easily and comfortably.



2





191001



EN 15090 F2A



EN 61340-4-3

Sustainable production

The main material used is bull hide leather produced in an environmentally friendly and socially responsible manner.

Standards basis: EN 15090

European standard for firefighting boots Type 2: All firefighting and rescue operations, protection against penetration, toe protection, no protection against chemical hazards

Identification

HI3	Heat insulation according to EN 15090
SRC	Slip resistance according to EN 20345
A	Anti-static shoe according to EN 20345
P	Penetration resistance by means of metal anti-puncture insert according to EN 20345
T	Toe protection according to EN 20345
CI	Cold insulation of the base according to EN 20345
AN	Ankle protection according to EN 20345
E	Energy absorption in the heel area according to EN 20345
WR	Waterproofing according to EN 20345 (protection is increased for models with membrane)
WRU	Water penetration and water absorption according to EN 20345
HRO	Reaction to contact heat according to EN 20345
FO	Fuel resistance in accordance with EN 20345

PULL-ON BOOT BOROS B1

Rosenbauer's pull-on boots are a proven component in the personal protective equipment of fire departments around the world. Their simplicity and light weight make them a reliable, comfortable-to-wear and easy-to-clean tool for emergency crews. The BOROS B1 features all these advantages and also offers the full range of equipment highlights that distinguishes the entire BOROS boot line.

The advantages

- Simplest handling
- Low weight
- Ease of maintenance
- Outstanding cost-effectiveness

Available sizes: EU 36-52 (UK 3-15)

Boot height: approx. 29 cm (11.4 in), without sole, EU size 43 (UK 9)

Weight: approx. 2.4 kg (5.3 lb), per pair, EU size 43 (UK 9)

191001xx* BOROS B1 with SympaTex® membrane

With insole for width 10

Accessories for BOROS B1

199002xx* Insole for width 10

199003xx* Insole for width 12

199004xx* Orthopedic insole

Only available for EU sizes EU 37-47 (UK 4-12)

*Use the EU size in the article number instead of "xx"

Equivalent sizes for Rosenbauer fire fighting boots

EU	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
UK	3	4	5	6	6.5	7	8	9	9.5	10.5	11.5	12	13	13.5	14	14.5	15
USA	4	4.5	5.5	6.5	7	7.5	8.5	9.5	10	11	12	12.5	13.5	14	14.5	15	15.5

BOROS B2

The combination of sure-footed lace-up boot with quick access has proven itself. The BOROS B2 merges the advantages of both systems and combines strong support with quick access. The boot is certified according to EN 15090F2A HI3 CI AN SRC and is therefore ideally suited for all firefighting and rescue operations.

Available sizes: EU 36-52 (UK 3-15)
 Leg height: approx. 29 cm (11.4 in), without sole, EU size 43 (UK 9)
 Weight: approx. 2.6 kg (5.7 lb), per pair, EU size 43 (UK 9)

**194001xx* BOROS B2 with SympaTex® membrane
 With insole for width 10**

Spare parts and accessories for BOROS B2

- 199002xx* Insole for width 10**
- 199003xx* Insole for width 12**
- 199004xx* Orthopedic insole**

Only available for EU sizes EU 37-47 (UK 4-12)

*Use the EU size in the article number instead of "xx", e.g. 19400143 for BOROS B2 size 43.

BOROS B3 CROSS

The BOROS B3 Cross is a short boot that has it all. A coated stainless steel cord runs through the boot and is adjusted or fixed by a push-rotary knob. Developed in-house for the requirements of fire and rescue, it is the only boot with leg height C for all firefighting and rescue operations certified according to EN 15090 F2A HI3 CI AN SRC. This means that it also complies with the EN 20345 standard for boots used in rescue operations. Different footwear for firefighting and rescue operations is a thing of the past. With the BOROS B3 Cross, firefighters and rescue workers now have the right boot for both operations.

Available sizes: EU 36-52 (UK 3-15)
 Leg height: approx. 23 cm (9.05 in), without sole, EU size 43 (UK 9)
 Weight: approx. 2.3 kg (5.1 lb), per pair, EU size 43 (UK 9)

**193002xx* BOROS B3 Cross with SympaTex® membrane
 With insole for width 10**

Spare parts and accessories for BOROS B3 Cross

- 199002xx* Insole for width 10**
- 199003xx* Insole for width 12**
- 199004xx* Orthopedic insole**

Only available for EU sizes EU 37-47 (UK 4-12)

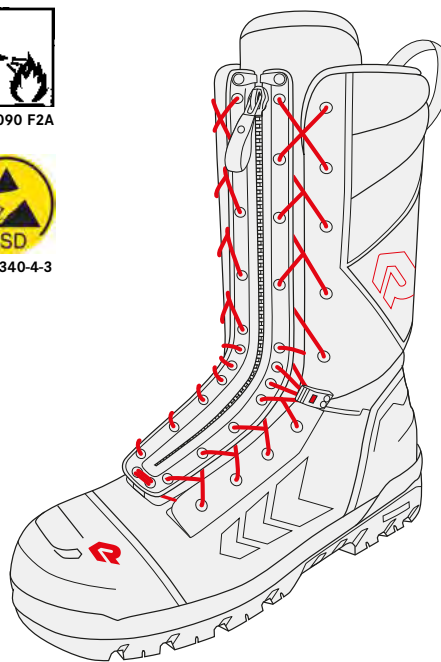
*Use the EU size in the article number instead of "xx", e.g. 19300243 for BOROS B3 Cross size 43.



EN 15090 F2A



EN 61340-4-3



194001



EN 15090 F2A



EN 61340-4-3



193002

BOROS B4 FIREFIGHTING BOOTS WITH ROSENBAUER QUICK-RELEASE SYSTEM

Thanks to the unique quick-release system, the BOROS B4 allows for individual adjustability as well as quick put on and removal - all with minimal weight.

Spring-loaded, central buckle for fixing the quick-release system

Handle for tightening the quick-release system with clip for fixing



Heat and flame resistant aramide ring laces

Upper adjustment hooks for the fit-form adjustment of zone 2 (leg)

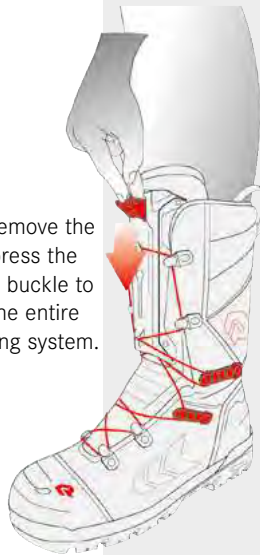
Lower adjustment hooks for the fit-form adjustment of zone 1 (foot)

Quick and precise

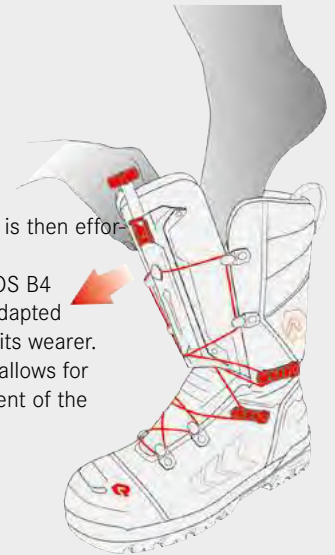
1. Once the foot is in the boot, one pull on the handle is enough to tighten the laces. The desired fit is automatically maintained via the central buckle.



2. To remove the boot, press the central buckle to open the entire fastening system.



3. Taking them off is then effortless and quick. In addition, the BOROS B4 can be perfectly adapted to the anatomy of its wearer. The 2-zone lacing allows for individual adjustment of the foot and leg area.



Complete freedom of movement with full protection

The BOROS B4 does justice to the natural mobility of the foot with its special 360° flex zone in the ankle area. It allows for natural tilting movements without neglecting protection against excessively large angles (as in the case of the feared twisting of an ankle). The emergency crews thus enjoy the maximum protective function, but almost forget that they are wearing a boot.



BOROS B4

BOROS B4

Thanks to Rosenbauer's quick-release system, the BOROS B4 can be perfectly attached to the foot with a single pull on the handle. Likewise, the central buckle releases the tension from the lacing system with a click and the boot is off in a flash. In addition, individual fine adjustment is possible in two separate zones.

The advantages

- Excellent fitting properties
- Easiest operation
- Very quick to put on and take off
- Low weight

Available sizes: EU 36-52 (UK 3-15)

Boot height: approx. 29 cm (11.4 in), without sole, EU size 43 (UK 9)

Weight: approx. 2.6 kg (5.7 lb), per pair, EU size 43 (UK 9)

194001xx* BOROS B4 with SympaTex® membrane
With insole for width 10

Spare parts and accessories for BOROS B4

199002xx* Insole for width 10

199003xx* Insole for width 12

199004xx* Orthopedic insole

Only available for EU sizes EU 37-47 (UK 4-12)

199407 BOROS B4 tightening strap set, 2 pcs. drawstrings (incl. handle, carrier and carrier cover)

199408 BOROS B4 cap set for lace carrier, 2 pcs.

199419 BOROS B4 main plate incl. nuts

199410 - BOROS B4 lace set

199418 2 pcs. shoes laces of the same length. By combining different lace lengths, the closure system can be fine-tuned as required.

Note: The laces are always red. The different lengths are distinguished by the different seam colors.

Standard configuration of lace sizes
(valid from boot production date 04/21)

EU size (UK)	Lower zone	Upper zone
36 (3)	yellow-green (-4)	green (-3)
37 (4)	yellow-green (-4)	green (-3)
38 (5)	green (-3)	white (-2)
39 (6)	green (-3)	white (-2)
40 (6.5)	green (-3)	white (-2)
41 (7)	white (-2)	blue (-1)
42 (8)	white (-2)	blue (-1)
43 (9)	white (-2)	blue (-1)
44 (9.5)	blue (-1)	brown (0)
45 (10.5)	blue (-1)	brown (0)
46 (11.5)	blue (-1)	brown (0)
47 (12)	brown (0)	black (1)
48 (13)	brown (0)	black (1)
49 (13.5)	brown (0)	black (1)
50 (14)	black (1)	red (2)
51 (14.5)	black (1)	red (2)
52 (15)	black (1)	red (2)

*Use the EU size in the article number instead of "xx"



EN 15090 FZA



EN 61340-4-3

194001



199002 / 199003

199004



199407

199408



199410

Size	Seam color	Order no.
-3	green	199411
-2	white	199412
-1	blue	199413
0	brown	199414
1	black	199415
2	red	199416
3	orange	199417
4	wine-red	199418



smaller ↑
larger ↓



PROTECTIVE CLOTHING GLOVES

3



PROTECTIVE CLOTHING

The relevant standard for protective clothing for firefighters in Europe is EN 469:2020. This standard describes the requirements in terms of finish, protection against heat and flame, mechanical and chemical properties, and comfort and safety. High-quality Rosenbauer protective clothing for firefighters is generally certified according to this standard, and in addition offers maximum safety and wearing comfort. A distinction is made between two performance levels for the requirements listed below:

Requirement	Performance level 1	Performance level 2
Heat transfer Flame/radiation	Low insulation X1	High insulation X2
Water-tightness	Water-permeable Y1	Largely waterproof Y2
Water vapor permeability	Impermeable to water vapor or slightly breathable Z1	Very breathable Z2

Significant changes compared to the 2005 version of EN 469:

- Additional contact heat testing is required for garments with heat transfer X2.
- The heat resistance of the sewing thread is tested at 260 °C (500 °F).
- Increased mechanical performance requirements (tensile strength of the main seams ≥ 300 N, tear resistance ≥ 30 N).
- Liquid chemical penetration testing is reduced to 2 chemicals.

Each garment certified according to EN 469 must be marked with a pictogram in connection with the respective performance levels, e.g.:



EN 469:2020

Protective clothing

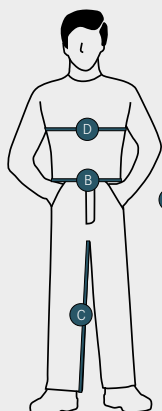
Sizing table for jackets		
FIRE FLEX, FIRE MAX 3, FIRE MAX 3 IRS, FIRE FIT 2, GAROS G30 and GAROS G10 jacket		
Body size A	Chest circumference D	European Size
Length A 156-164	78-86	40-42-A
	86-94	44-46-A
	94-102	48-50-A
	102-110	52-54-A
	110-118	56-58-A
	118-129	60-64-A
	129-142	66-70-A
	118-126	60-62-A
	126-134	64-66-A
	134-142	68-70-A
Length B 164-172	78-86	40-42-B
	86-94	44-46-B
	94-102	48-50-B
	102-110	52-54-B
	110-118	56-58-B
	118-129	60-64-B
	129-142	66-70-B
	118-126	60-62-B
	126-134	64-66-B
	134-142	68-70-B
Length C 172-180 (182*)	78-86	40-42-C
	86-94	44-46-C
	94-102	48-50-C
	102-110	52-54-C
	110-118	56-58-C
	118-129	60-64-C
	129-142	66-70-C
	118-126	60-62-C
	126-134	64-66-C
	134-142	68-70-C
Length D 180-188 (192*)	78-86	40-42-D
	86-94	44-46-D
	94-102	48-50-D
	102-110	52-54-D
	110-118	56-58-D
	118-129	60-64-D
	129-142	66-70-D
	118-126	60-62-D
	126-134	64-66-D
	134-142	68-70-D
Length E 188-196 (202*)	78-86	40-42-E
	86-94	44-46-E
	94-102	48-50-E
	102-110	52-54-E
	110-118	56-58-E
	118-129	60-64-E
	129-142	66-70-E
	118-126	60-62-E
	126-134	64-66-E
	134-142	68-70-E

Applies to all models except FIRE FLEX, GAROS G30 and GAROS G10

ONLY applies to FIRE FLEX, and GAROS G30

Applies to operational clothing

Applies to GAROS G30 and GAROS G10



If the size you require falls outside the standard size chart, we ask that you take the following measurements:

- A Body size
 - B Waist size
 - C Inseam
 - D Chest circumference
- Measurements in cm

* Depending on the body shape, these lengths are also suited to wearers up to the height given in brackets.

Sizing table for trousers			
FIRE FLEX, FIRE MAX 3, FIRE FIT 2			
Body size A	Waist size B	Inseam C	European Size
Length A 156-164	66-74	70	40-42-A
	74-82	70	44-46-A
	82-90	70	48-50-A
	90-98	70	52-54-A
	98-106	70	56-58-A
	106-117	70	60-64-A
	106-114	70	60-62-A
	114-122	70	64-66-A
	122-130	70	68-70-A
	Length B 164-172	66-74	74
74-82		74	44-46-B
82-90		74	48-50-B
90-98		74	52-54-B
98-106		74	56-58-B
106-117		74	60-64-B
117-130		74	66-70-B
106-114		74	60-62-B
114-122		74	64-66-B
122-130		74	68-70-B
Length C 172-180 (182*)	66-74	78	40-42-C
	74-82	78	44-46-C
	82-90	78	48-50-C
	90-98	78	52-54-C
	98-106	78	56-58-C
	106-117	78	60-64-C
	117-130	78	66-70-C
	106-114	78	60-62-C
	114-122	78	64-66-C
	122-130	78	68-70-C
Length D 180-188 (192*)	66-74	82	40-42-D
	74-82	82	44-46-D
	82-90	82	48-50-D
	90-98	82	52-54-D
	98-106	82	56-58-D
	106-117	82	60-64-D
	117-130	82	66-70-D
	106-114	82	60-62-D
	114-122	82	64-66-D
	122-130	82	68-70-D
Length E 188-196 (202*)	66-74	86	40-42-E
	74-82	86	44-46-E
	82-90	86	48-50-E
	90-98	86	52-54-E
	98-106	86	56-58-E
	106-117	86	60-64-E
	117-130	86	66-70-E
	106-114	86	60-62-E
	114-122	86	60-62-E
	122-130	86	68-70-E

Sizing table for trousers			
Operational clothing GAROS G30 and GAROS G10 trousers			
Body size A	Waist size B	Inseam C	European Size
Length A 156-164	66-70	70	40-A
	70-74	70	42-A
	74-78	70	44-A
	78-82	70	46-A
	82-86	70	48-A
	86-90	70	50-A
	90-94	70	52-A
	94-98	70	54-A
	98-102	70	56-A
	102-106	70	58-A
	106-111	70	60-A
	111-117	70	62-A
	106-110	70	60-A
	110-114	70	62-A
114-118	70	64-A	
Length B 164-172	66-70	74	40-B
	70-74	74	42-B
	74-78	74	44-B
	78-82	74	46-B
	82-86	74	48-B
	86-90	74	50-B
	90-94	74	52-B
	94-98	74	54-B
	98-102	74	56-B
	102-106	74	58-B
	106-111	74	60-B
	111-117	74	62-B
	106-110	74	60-B
	110-114	74	62-B
114-118	74	64-B	
Length C 172-180 (182*)	66-70	78	40-C
	70-74	78	42-C
	74-78	78	44-C
	78-82	78	46-C
	82-86	78	48-C
	86-90	78	50-C
	90-94	78	52-C
	94-98	78	54-C
	98-102	78	56-C
	102-106	78	58-C
	106-111	78	60-C
	111-117	78	62-C
	106-110	78	60-C
	110-114	78	62-C
114-118	78	64-C	
Length D 180-188 (192*)	66-70	82	40-D
	70-74	82	42-D
	74-78	82	44-D
	78-82	82	46-D
	82-86	82	48-D
	86-90	82	50-D
	90-94	82	52-D
	94-98	82	54-D
	98-102	82	56-D
	102-106	82	58-D
	106-111	82	60-D
	111-117	82	62-D
	106-110	82	60-D
	110-114	82	62-D
114-118	82	64-D	
Length E 188-196 (202*)	66-70	86	40-E
	70-74	86	42-E
	74-78	86	44-E
	78-82	86	46-E
	82-86	86	48-E
	86-90	86	50-E
	90-94	86	52-E
	94-98	86	54-E
	98-102	86	56-E
	102-106	86	58-E
	106-111	86	60-E
	111-117	86	62-E
	106-110	86	60-E
	110-114	86	62-E
114-118	86	64-E	

All dimensions in „cm“



141470 / 141432



141471 / 141432



141474 / 141437

FIRE FLEX PROTECTIVE SUIT

Certified according to EN 469:2020, EN 1149-5:2018 (anti-static test), EN 61482-2:2018 (arc fault test), EN 343:2019 (protection against rain) and EN 14360:2004 (rain test). In all tests, this suit achieves the highest protection levels in all three categories: heat transfer, waterproofness, and water vapor resistance.

In the FIRE FLEX, a suit has been designed that offers even more comfort and freedom of movement with practical details, sophisticated features and a new ergonomic cut. Improved sleeve cuts and a special shoulder-arm construction guarantee unrestricted mobility. The FIRE FLEX has been perfected by adding padded grips on the pocket flaps and the zipper strip, a new attachment technique for reflective patches, robust moisture barriers, and much more.

The FIRE FLEX is available with three different outer fabric materials:

NOMEX® NXT

- Visual and technical improvement of the proven NOMEX® Tough quality
- Longer service life due to 300% higher tear propagation resistance
- Outstanding visual appearance after several washes thanks to intelligent fabric design
- New technical design

NOMEX® XTR

- Long service life and high tear resistance
- Customized technical design
- Outstanding appearance after washing thanks to the use of very fine yarns
- 82% meta-aramid/16% para-aramid/2% anti-static fiber
- With long-term impregnation

X55 with PBI

- The outer fabric with the highest mechanical performance properties
- Excellent tensile strength and maximum tear strength
- Increased flame resistance

The materials used guarantee durability and longevity. The FIRE FLEX has an innovative fabric structure and a well-thought-out material layer composition. The use of a high-quality 3D PTFE membrane protects the wearer against moisture and wind from the outside. The 3D PTFE membrane is also certified as virus and bacteria-proof on the surface and on the seams. Inside there is a permanently sewn-in lining made of melamine resin and aramid fleece with a quilted aramid/viscose cover for the best heat and cold insulation.

FIRE FLEX

FIRE FLEX jackets

Certified according to EN 469:2020 (highest protection level X2, Y2 and Z2) and EN 1149-5:2018, EN 61482-2:2018, EN 343:2019.

Design

- New, ergonomic jacket cut with a high level of protection and numerous functional features
- Smooth-running plastic zipper with quick release function
- Ergonomically preformed elbows with reinforcement; new sleeve and shoulder arm construction ensure better freedom of movement
- Flame protection collar to be pulled up to just below the helmet
- Heat protectors in the shoulder area
- Customized width adjustment on the sleeve with Velcro loop
- Breathable 3-layer moisture barrier on sleeve hem and front trim
- Retaining straps for handheld microphone attached to both sides
- With lamp holder on the front bar and radio pockets on both sides
- Patch side pockets and two slanted, cut-in comfort pockets
- Practical, red-colored padded grip pieces on all pocket straps and front strips
- 15 x 2.5 cm (5.9 x 1 in) Velcro patch for attaching a name tag
- With breathable, patched yellow/silver/yellow reflective stripes on the front and back
- Shoulder, sleeve and collar areas equipped with silver reflective trim
- Back length: 85 cm (33.5 in), size 52-54 C

Optional design

Saving and rescuing with FIRE FLEX. The innovative FIRE FLEX protective jacket enables emergency services to rescue others and stay safe themselves. A robust rescue strap is attached to the back of the jacket as standard, with which another emergency responder can be pulled out of the danger zone.

The rescue strap consists of a two-layer webbing made of heat-resistant NOMEX® and runs across the back below the collar to evenly distribute the tensile load. The optionally available Rosenbauer IRS belt can be easily threaded into the inner tunnel of the jacket and serves as a restraint, positioning, and rescue system. It keeps the rescuer safe and stable in one position and prevents falling from height. In extreme situations, the IRS belt can also be used for self-rescue.

Available sizes: 40-42 to 68-70

Each in five lengths*: A (156-164), B (164-172), C (172-180),

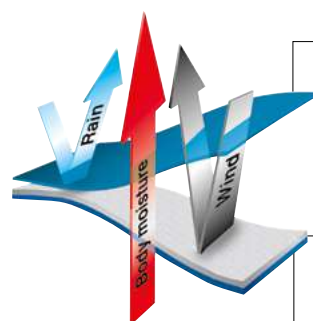
D (180-188) and E (188-196)

Weight: 1.85 kg (4.1 lb) (size 52-54 C)

Outer fabric	Order no. jacket
NOMEX® NXT, color: black-blue/red	14 1470
NOMEX® NXT, color: black-blue/gold	14 1471
NOMEX® NXT, color: black-blue **	14 1472
NOMEX® NXT, color: gold **	14 1473
NOMEX® XTR, color: black-blue/red **	14 1442
NOMEX® XTR, color: black-blue/gold **	14 1443
NOMEX® XTR, color: black-blue **	14 1444
NOMEX® XTR, color: gold **	14 1446
X55 mit PBI, color: gold/brown	14 1474

*See page 51 for sizing table.

**Item not shown



Fabric composition:

Outer fabric NOMEX® NXT

Density: ca. 195 g/m²
(5.8 oz/yd²)

Colors: black-blue/red, black-blue/gold, black-blue, gold

Outer fabric NOMEX® XTR

Weight: approx. 195 g/m²
(5.8 oz/yd²)

Colors: black-blue/red, black-blue/gold, black-blue, gold

Outer fabric X55 with PBI

Weight: approx. 205 g/m²
(6.1 oz/yd²) Color: gold/brown

Moisture barrier (liner):

3D PTFE membrane on melamine resin fiber/aramid carrier
Weight: approx. 125 g/m²
(3.7 oz/yd²)

Safety thermal lining

Melamine resin fiber/aramid fleece with quilted cover made of aramid/viscose blended fabric
Weight: approx. 180 g/m²
(5.4 oz/yd²)



14 1470



14 1471



14 1474



141470 / 1410629 / 1405966
optional IRS version



IRS tunnel with inserted IRS belt



141253

Recommended accessories for FIRE FLEX jacket

1405966 Name strip

Approx. 15 x 3 cm (5.9 x 1.2 in), specify tag and lettering color!

Rear lettering

In capital letters, lettering height 4 cm (1.6 in).
Specify lettering color when ordering!

140949 Attached directly to the back of the jacket

140948 Attached with Velcro

Back patch size: 10 x 45 cm (4 x 18 in)

14059922 Fleece part for back patch

45 x 10 cm (18 x 4 in)

141062 Attached with Velcro

Back patch size: 8 x 38 cm (3 x 15 in), with text in two lines, font height 3 cm (1.2 in)

1410621 Fleece part for back patch

38 x 8 cm (15 x 3.1 in)

1410628 Pocket in zipper strip

Napoleon pocket

1410629 Tunnel for FIRE FLEX protective jacket

For use in conjunction with the IRS belt

141253 Safety tether and IRS rescue strap with carabiner

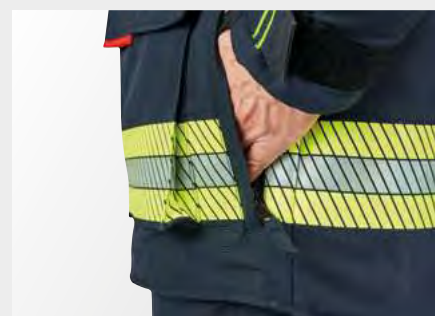
Certified according to EN 1498 Class A and EN 358.
Consists of an 85 mm (3.4 in) wide aramid belt with a triple-lock HMS aluminum carabiner according to EN 362.
Available in sizes 40-42 to 66-70 (analogous to jacket size).



Rescue strap on the back



Plastic zipper with quick release function



Angled comfort side pockets



Lamp holder on the front strip
and radio pockets on both sides



Breathable 3-layer moisture barrier
on sleeve hem and front strip



Inspection opening to check the membrane

FIRE FLEX trousers

Certified according to EN 469:2020 (highest protection level X2, Y2 and Z2) and EN 1149-5:2018, EN 61482-2:2018, EN 343:2019.

Design

- Comfortable, ergonomically designed trousers
- With 5 cm (2 in) wide, Velcro-fitted adjustable, removable suspenders
- With side elastic for optimal waist adjustment
- Belt loops around the waistband to facilitate belt wearing
- Fly with zipper and Velcro fastener, covered by flap
- Two patch side pockets, covered with a flap and red-colored handles, with a metal ring for attaching gloves under each flap
- 15 x 2.5 cm (5.9 x 1 in) Velcro tab to attach a name badge to the left side pocket flap.
- Two internal side pockets, closed with zippers
- Moisture barrier made of flame-retardant PU-coated aramid fabric along the trouser seam, so no „drawing up“ of wetness
- Ergonomically preformed knees and sewn-in knee pads made of non-water absorbent cellular rubber
- Reinforcements on the knees, on the trouser hem and on the inside of the trouser cuffs made of black, flame-retardant, silicone-carbon-coated para-aramid fabric.
- Inspection opening to check the membrane
- With breathable, patched yellow/silver/yellow reflective stripes

Available sizes: 40-42 to 68-70

Each in five lengths*: A (156-164), B (164-172), C (172-180),

D (180-188) and E (188-196)

Weight: 1.55 kg (3.4 lb) (48-50 C)

Outer fabric	Order no. trousers
NOMEX® NXT, color: black-blue	141432
NOMEX® NXT, color: gold **	141435
NOMEX® XTR, color: black-blue **	141445
NOMEX® XTR, color: gold **	141447
X55 with PBI, color: gold/brown	141437

*See page 51 for sizing table.

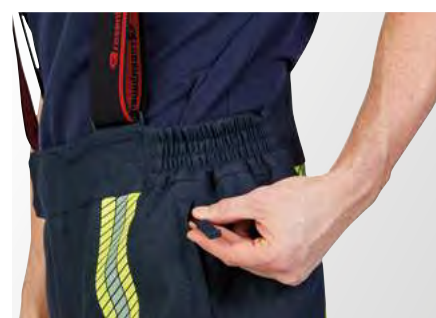
**Item not shown



Ergonomically shaped knees with reinforcement



Side pocket with glove holder ring



Elastic drawstring for optimal adjustment of the waist



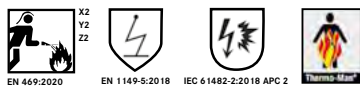
5 cm (2 in) wide detachable, padded comfort suspenders



Moisture barrier made from robust flame-retardant PU-coated aramid fabric



Reinforcement on the inner side of the bottom of the trouser legs



141200 / 141201



141202 / 141203



141262 / 141265

FIRE MAX 3 PROTECTIVE SUIT

Certified according to EN 469:2020 and EN 1149-5:2018 (anti-static). In all EN 469:2020 tests, this suit achieves the highest protection levels in all three categories: heat transfer, water resistance and water vapor resistance. The entire suit meets the EN 469 visibility requirements. In addition, the FIRE MAX 3 also offers excellent protection against thermal arc hazards IEC 61482-2 Class 2.

The FIRE MAX 3 protective suit was developed to offer firefighters the highest level of thermal protection while at the same time providing them with the best wear comfort. A completely new construction ensures an extremely low resistance to water vapor permeation, which means that sweat is transported away from the body very quickly to the outside. The standard requires a water vapor resistance in the highest class of $\leq 30 \text{ m}^2 \text{ Pa/W}$. FIRE MAX 3 achieves $15 \text{ m}^2 \text{ Pa/W}$ with the new material structure.

The overall weight of the suit is only 3.1 kg (6.8 lbs) for size 48-50 C, and is therefore significantly lower than almost all products currently available on the firefighting service market.

This suit also leaves nothing to be desired when it comes to the practical features. Many practical pockets, holders for lamp and loops, ergonomically pre-shaped knees and elbows, detachable suspenders, zip openings to allow inspection of the membrane, etc. complete this protective suit. New standards have been set with a modern cut, numerous accessories and comprehensive reflective stripes.

The FIRE MAX 3 is available with three different outer fabric materials:

NOMEX® Tough

- One of the classic fabrics for protective clothing
- Very good mechanical and thermal properties
- Very good maintenance properties

NOMEX® NXT

- Visual and technical improvement of the proven NOMEX® Tough quality
- Longer service life thanks to higher tear resistance and long-term impregnation (up to 40 washes without reimpregnation)
- Outstanding visual appearance after several washes thanks to intelligent fabric construction
- New technical design

X55 with PBI

- The outer fabric with the highest mechanical performance properties
- Excellent tensile strength and maximum tear strength
- Increased flame resistance

The structure of the FIRE MAX 3 protective suit is a well-thought-out concept: the use of a high-quality 3D PTFE membrane protects the wearer of the suit against moisture and wind from the outside. Inside there is a permanently sewn-in lining made of melamine resin aramid fiber fleece with a quilted aramid/viscose cover for the best heat and cold insulation.

FIRE MAX 3

FIRE MAX 3 – jackets

Certified according to EN 469:2020 (highest protection level X2, Y2 and Z2) and EN 1149-5:2018.

Design

- Comfortable, ergonomically designed protective jacket with a high level of protection and numerous functional features
- Smooth-running plastic zipper, covered by two flaps
- Ergonomically shaped elbows reinforced with flame-retardant, silicon-carbon coated Para-aramid fabric
- Flame protection collar to be pulled up to just below the helmet
- Heat protectors in the shoulder area
- Customized width adjustment on the sleeve with Velcro loop
- Sleeve ends with comfort NOMEX® knitted cuff and thumb hole
- Radio pockets on both sides as standard
- With two cut-in side pockets, with a metal ring for attaching gloves under the left side pocket's flap and a loop and snap fastener under the right side pocket's flap
- Patch pockets on both sides on the inside of the jacket
- With lamp holder on front band
- 15 x 2.5 cm (5.9 x 1 in) Velcro patch for attaching name tag over left radio pocket
- Holding loop for handheld microphone on left
- Velcro strap for attaching a slide-on loop
- Inspection opening to check the membrane
- Body with 5 cm (2 in) yellow and 5 cm (2 in) yellow/silver/yellow reflective stripes running around, 5 cm (2 in) yellow/silver/yellow reflective stripes running around the sleeves; two 5 cm (2 in) wide yellow/silver/yellow reflective stripes running vertically on the front and slightly sloping on the back
- Shoulder, sleeve and collar areas equipped with silver reflective trim
- Back length: 85 cm (33.5 in), size 52-54 C

Available sizes: 40-42 to 66-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180), D (180-188), E (188-196), weight: 1.63 kg (3.6 lb) (size 48-50 C)

Outer fabric	Order no. jacket
NOMEX® Tough, color: dark blue	141200
NOMEX® Tough, color: gold	141202
NOMEX® NXT, color: red	141262
X55 with PBI, color: gold/brown	141240

Accessory for the FIRE MAX 3 jacket

- 1405966 Name tags**
 Approx. 15 x 3 cm (5.9 x 1.2 in)
 Specify tag and lettering color!

Rear lettering

In capital letters, lettering height 4 cm (1.6 in). Specify lettering color when ordering!

- 140949 Attached directly to the back of the jacket**
141062 Attached with Velcro
 Back patch size: 8 x 38 cm (3.1 x 15 in)
1410621 Fleece part for back patch, 38 x 8 cm (15 x 3.1 in)
1410624 Panic zipper
 Instead of a plastic zipper
1410625 Pocket in zipper strip
 Napoleon pocket

* See page 51 for sizing table.

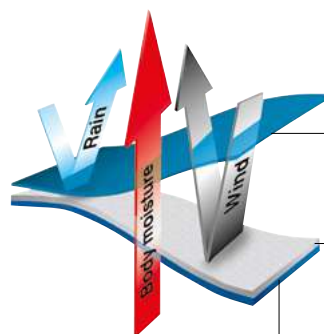
Fabric composition:

Outer fabric NOMEX® Tough, NOMEX® NXT
 Weight: approx. 195 g/m² (5.8 oz/yd²) Color: dark blue or gold, red (NOMEX® NXT)

Outer fabric X55 with PBI:
 Weight: approx. 225 g/m² (6.1 oz/yd²) Color: gold-yellow

Moisture protection (liner):
 3D PTFE membrane on melamine resin fiber/ aramid backing, water-proof and windproof, breathable
 Weight: approx. 125 g/m² (3.7 oz/yd²)

Safety thermal lining:
 Melamine resin fiber/aramid fleece with quilted cover made of aramid/ viscose blended fabric
 Weight: approx. 180 g/m² (5.4 oz/yd²)



141200



141202



141240



Comfort sleeve cuffs



Jacket closure



Shoulder reinforcement and chest pocket version



Radio pocket with microphone retaining strap



Lamp holder



Inspection opening



141266



141269



141267



141253



Jacket with built-in IRS belt

FIRE MAX 3 IRS jacket

Certified according to EN 469:2020 and EN 1149-5:2018 (anti-static) and EN 61482-2:2018 (protective clothing against the thermal hazards of an electric arc).

This version of the proven FIRE MAX 3 Jacket can be equipped with an integrated safety belt or rescue strap. For this purpose, the jacket is equipped with an internal tunnel in which the Rosenbauer IRS belt (optionally available) can be installed (or retrofitted).

This gives the wearer the ability to secure victims or - in extreme cases - to facilitate their own rescue.

Another highlight of the IRS jacket is the extensive striping. Thanks to the HuPF-comparable striping, the jacket alone meets the visibility requirements of EN 469 (even in the smallest size). As a result, it is not necessary to wear a warning vest in some countries (warning vest exemption), as stipulated by statutory requirements.

The IRS jacket is additionally equipped with a robust quick-release zipper. Two fleece parts for attaching a 38 x 8 cm (15 x 3.1 in) back patch (optional) are attached to the back.

Available sizes: 40-42 to 66-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180), D (180-188), E (188-196)

Weight: 1.63 kg (3.6 lb) (size 48-50 C)

Outer fabric	Order no. jacket
NOMEX® NXT, color: dark blue	141266
NOMEX® NXT, color: gold	141267
NOMEX® NXT, color: red	141268
NOMEX® NXT, color: red/blue bicolor	141269
X55 with PBI, color: gold/brown	141242

Accessories for FIRE MAX 3 IRS jacket

1405966 Name tags

Approx. 15 x 3 cm (5.9 x 1.2 in),
Specify tag and lettering color!

141062 Velcro back patch

Size 38 x 8 cm (15 x 3.1 in), two lines,
lettering height 3 cm (1.2 in)

1406352 Fleece back part removed

140949 Lettering attached directly to the back

1410625 Pocket in zipper strip

Napoleon pocket

141253 Safety tether and IRS rescue strap with carabiner

Certified according to EN 1498 Class A and EN 358.
Consists of an 85 mm (3.4 in) wide aramid belt with a triple-lock HMS aluminum carabiner according to EN 362.
Available in sizes 40-42 to 66-70 (analogous to jacket size).

FIRE MAX 3 – Trousers

Certified according to EN 469:2020 (highest protection level X2 Y2 and Z2) and EN 1149-5:2018 (anti-static).

Design

- Comfortable, ergonomically designed trousers
- With 5 cm (2 in) wide, velcro-fitted removable suspenders
- With side elastic for optimal waist adjustment
- Belt loops around the waistband to facilitate belt wearing
- Fly with zip and Velcro fastener, cove red with flap
- Two patch side pockets covered with flaps; with metal ring for attaching gloves under each flap
- 15 x 2.5 cm (5.9 x 1 in) Large Velcro section for attaching a name strip to the left side pocket flap
- Two internal side pockets, closed with zippers
- Moisture barrier made of flame-retardant PU-coated aramid fabric along the trouser seam, so no „drawing up“ of wetness
- Ergonomically pre-shaped knees
- Additionally equipped with sewn-in knee pads made of water-repellent cellular rubber
- Reinforcements on the knees, on the trouser hem and on the inside of the trouser cuffs made of black, flame-retardant, silicone-carbon-coated para-aramid fabric
- Inspection opening to check the membrane
- With circumferential 5 cm (2 in) wide yellow and 5 cm (2 in) wide yellow/silver/yellow reflective stripes on the trouser legs and a 5 cm (2 in) wide silver, vertical reflective stripe on the outside of the trousers

Available sizes: 40-42 to 66-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180),

D (180-188), E (188-196)

Weight: 1.46 kg (3.2 lb), size 48-50 C

Outer fabric	Order no. trousers
NOMEX® Tough, color: dark blue	14 1201
NOMEX® Tough, color: gold	14 1203
NOMEX® NXT, color: black-blue	14 1263
NOMEX® NXT, color: gold	14 1264
NOMEX® NXT, color: red	14 1265
X55 with PBI, color: gold/brown	14 1241

Accessories for FIRE MAX 3 trousers

14 1189 Comfort suspenders

With 5 cm (2 in) wide elastic straps of Rosenbauer design. With foam padding for increased wearing comfort and additional relief in the shoulder area. Available in 5 lengths: A, B, C, D, E

14 1190 Replacement suspenders

Available in 5 lengths: A, B, C, D, E

*See page 51 for sizing table.



14 1201



14 1263



14 1189C



Knee reinforcement



Inspection opening



Removable suspenders



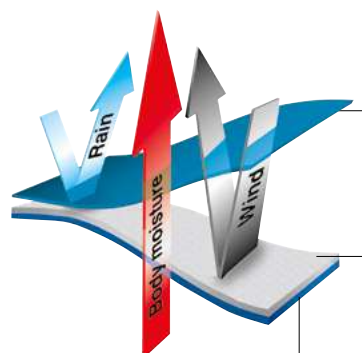
Reinforcement at the trouser hem



Waistband with belt loops



Side pocket with flap and fleece part for name tag



Material structure:

Outer fabric: NOMEX® Tough
Weight: approx. 195 g/m² (5.8 oz/yd²)
Color: dark blue

Moisture barrier: water-proof and breathable membrane approx. 150 g/m² (4.5 oz/yd²)

Inner lining: Aramide fleece with stitched aramid/viscose covering, sewn-in
Weight: approx. 270 g/m² (8.1 oz/yd²)



141350 / 141351

FIRE FIT 2

Certified according to EN 469:2020 (highest protection levels X2 Y2 and Z2) and EN 1149-5 (anti-static). This protective suit offers excellent protection for the many areas of use of fire services. Proven materials combined with a comfortable cut and solid basic equipment constitute the basis for the FIRE FIT 2. A new sleeve design ensures even more freedom of movement. Weighing in at just under 2.9 kg (6.4 lb), this suit is one of the lightest in its category.

FIRE FIT 2 – jacket

Certified according to EN 469:2020 (highest protection levels X2 Y2 and Z2) and EN 1149-5 (anti-static).

Features

- Comfortable, ergonomically designed protective jacket provides the highest level of protection
- Specially designed sleeves ensure enhanced freedom of movement
- Moisture blocker made from flame-retarding PU-coated aramide fabric on jacket ribbed cuffs and waist, preventing ingress of moisture inside the jacket
- Robust, smooth-running plastic zipper, covered by two flaps
- Flame protection collar can be pulled up to under the helmet
- Individual width adjustment on the sleeves by Velcro strap
- Sleeve ends with comfort NOMEX® knitted cuff and thumb hole for added comfort
- Special workmanship ensures the jacket's layers remain in place when donning and doffing
- Radio pocket on left breast as standard
- With two inside side pockets with strap and pushbutton to attach a carabiner (not included in delivery scope)
- 15 x 2.5 cm (5.9 x 1 in) fleece strip for attaching a name strip above the radio pocket
- Holding loop for PTT or microphone on the left
- Torso with 5 cm (2 in) and 7.5 cm (3 in) circumferential yellow/silver/yellow reflective stripes, on the sleeves with 7.5 cm (3 in) circumferential yellow/silver/yellow reflective strip and on the front side at breast height horizontal with 5 cm (2 in) yellow/silver/yellow reflective strips
- Back length 85 cm (33.5 in) (size 52-54 C)

Sizes: 40-42 to 66-70

Each in three lengths*: B (164-172), C (172-180) and D (180-188)

Weight: 1.55 kg (3.5 lb) (size 48-50 C)



Radio pocket and holding loop for microphone

FIRE FIT 2 – trousers

Certified according to EN 469:2020 (highest protection levels X2 Y2 and Z2) and EN 1149-5 (anti-static).

Features

- Comfortable, ergonomically designed trousers
- 5 cm (2 in) wide, fixed suspenders as standard
- Optimum fit is ensured through adjustable elasticated bands on each side
- Fly with zipper and Velcro fastener, covered by flap
- Two sewn-on side pockets, covered with flap; lower edge of the pocket designed with bottom gusset
- 15 x 2.5 cm (5.9 x 1 in) Velcro section to attach a name badge to the left side pocket
- Moisture blocker made from flame-retardant PU-coated aramide fabric preventing the ingress of moisture
- Additionally equipped with fixed sewn-in knee pad made from water-repellent cellular rubber
- Knee reinforcement made from black flame-retarding silicon-carbon coated para-aramide fabric
- Each leg has circumferential 5 cm (2 in) and 7.5 cm (3 in) yellow/silver/yellow reflective stripes

Sizes: 40-42 to 66-70

Each in three lengths*: B (164-172), C (172-180) and D (180-188)

Weight: 1.3 kg (2.9 lb) (size 48-50 C)

Outer fabric	Order no. jacket	Order no. trousers
NOMEX® Tough, Color: dark blue	14 1350	14 1351

Recommended accessories for FIRE FIT 2 jacket

- 1405966 Name strip**
Approx. 15 x 3 cm (5.9 x 1.2 in)
Please state stripe and embroidery colors!
- 140949 Lettering on back**
Printed directly onto the jacket. In upper-case letters, font height 4 cm (1.6 in). With text in two lines. Please indicate lettering and lettering color with order!

*Size table please refer to page 51.



14 1350 / 14 1351



14 1351



Knees-reinforcements sewn-in knee pad



EN 469:2020



EN 1149-5:2018



EN ISO 11612:2015 A1 B2 C1



EN 343:2019

Fabric composition:

Outer fabric NOMEX® NXT

Temperature-resistant aramid fiber with long-term impregnation.

Density: ca. 195 g/m²
(5.8 oz/yd²)

Colors: black-blue, black-blue/red, black-blue/gold, black-blue, gold, gold/blue, orange, orange/blue

Moisture barrier (liner):

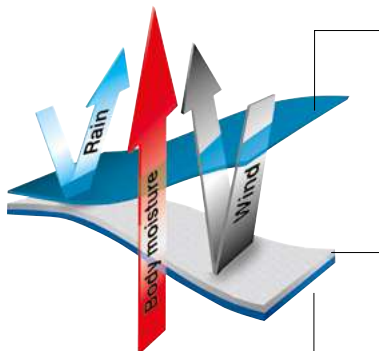
Waterproof and breathable membrane.

Weight: approx. 150 g/m²
(4.5 oz/yd²)

Inner lining

Mixed aramid and viscose FR fabric

Weight: approx. 160 g/m²
(4.9 oz/yd²)



140692 / 140677



140693 / 140677



140676 / 140677

TECHNICAL ASSISTANCE SUIT GAROS G30

Specially developed for technical assistance and firefighting on open terrain. Can be used for all kinds of firefighting operations except indoor firefighting. Certified according to EN 469:2020 (protection level X1, Y2 and Z2), EN ISO 11612:2015 (performance level A1+B2+C1), EN 343:2019 (protection level 4, 3, X) and EN 1149-5:2018 (anti-static)

Jacket design

- New, ergonomic jacket cut with a high level of protection and numerous functional features
- Smooth-running plastic zipper
- Ergonomically pre-shaped elbows
- New sleeve and shoulder-arm design for improved freedom of movement
- Flame protection collar to be pulled up to just below the helmet
- Customized width adjustment on the sleeve with Velcro loop
- Moisture barrier made of flame-retardant, PU-coated para-aramid fabric on the sleeve and jacket hems, preventing moisture from being „drawn up.“
- Retaining straps for handheld microphone attached to both sides
- With lamp holder on the front bar and radio pockets on both sides
- Side pockets
- Two sewn-in inner pockets
- 15 x 2.5 cm (5.9 x 1 in) Velcro patch for attaching a name tag
- With breathable, patched yellow/silver/yellow reflective stripes on the front and back
- With inspection opening for checking the membrane
- Back length 82.5 cm (32.5 in) (size 52-54 C)

Available sizes: 40-42 to 68-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180), D (180-188), E (188-196)

Weight: approx. 1.45 kg (3.2 lb) (size 52-54C)

Outer fabric	Order no. jacket
NOMEX® NXT, color: black-blue/red	140692
NOMEX® NXT, color: black-blue/gold	140693
NOMEX® NXT, color: black-blue	140676
NOMEX® NXT, color: gold/black-blue	140695
NOMEX® NXT, color: gold	140678
NOMEX® NXT, color: orange/black-blue	140694
NOMEX® NXT, color: orange	140690

Jacket accessories

- 1405966 Name tag stitched on Velcro**
Approx. 15 x 3 cm (5.9 x 1.2 in), specify tag and lettering color.
- 1409504 Diagonally cut comfort pockets on side**
(under the jacket's side pockets)
- 1410625 Pocket with zipper closure, Napoleon pocket**

Rear lettering

In capital letters, lettering height 4 cm (1.6 in). Specify lettering color when ordering!

140949 Attached directly to the back of the jacket

1410621 Fleece part for attaching a back label

Size: 8 x 38 cm (3.2 x 15 in)

141062 Attached with Velcro,

Back patch size: 8 x 38 cm (3.2 x 15 in)

Trousers design

- Comfortable, ergonomic trousers with 5 cm (2 in) wide, velcro-fitted adjustable removable suspenders
- Elastic waistband for perfect adjustment
- Fly with zip and Velcro fastener, covered by a flap
- Two side pockets, with metal ring for attaching gloves under each flap
- 15 x 2.5 cm (5.9 x 1 in) Velcro patch for attaching a name tag to the left side pocket flap
- Two internal side pockets, closed with zippers
- Moisture barrier made of flame-retardant PU-coated aramid fabric along the trouser seam, so no „drawing up“ of wetness
- Ergonomically preformed knees and sewn-in knee pads made of non-water-absorbent cellular rubber
- Reinforcements at the knees, on the cuffs and interior seams of the pants made of black flame-retarding silicon-carbon coated para-aramid fabric.
- Breathable, patched yellow/silver/yellow reflective stripes
- Inspection opening for checking the membrane
- Velcro strap at the bottom of the trousers for tightening

Available sizes: 40-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180),

D (180-188), E (188-196)

Weight: approx. 1.5 kg (3.3 lb), (size 54 C)

Outer fabric	Order no. trousers
NOMEX® NXT, color: black-blue	140677
NOMEX® NTX, color: gold	140679
NOMEX® NXT, color: orange	140691

*Size table please refer to page 51.



140695 / 140679



140678 / 140679



140690 / 140691



EN 15384:2020



EN ISO 11612:2015 A1 B2 C1



EN 1149-5:2018



EN 16689:2017



140850 / 140851



140852 / 140853



140854 / 140855

GAROS G10 PROTECTIVE SUIT FOR WILDFIRE AND TECHNICAL ASSISTANCE

Light, comfortable, and breathable, this single-layer suit was developed for the highest physical demands in order to offer a high level of comfort in wildfire scenarios or high-temperature technical rescue operations. Certified according to EN 15384:2020, EN ISO 11612:2015 (performance level A1+B2+C1), EN 1149-5:2018 (antistatic) and EN 16689:2017.

Two different versions of the GAROS G10 protective suit are available: one for wildfire only (GAROS G10) and one combined for wildfire and technical rescue operations (GAROS G10 TR). Both models are flame and heat resistant in accordance with ISO 11612 and comply with wildfire standard EN 15384. As a technical rescue suit, the GAROS G10 TR offers enhanced visibility to comply with the EN 16689 standard for technical rescue clothing.

Material composition: gold/blue: 50% viscose FR/49% aramid/1% anti-static 240 g/m² (7 oz/yd²) yellow high visibility: 35% modacrylic/33% viscose FR/30% aramid/ 2% anti-static 260g/ m² (7.7oz/yd²)

Jacket design

- Ergonomic, comfortable jacket cut
- Smooth-running plastic zipper
- Ergonomically pre-shaped elbows
- Special sleeve and shoulder-arm design for better freedom of movement
- Flame protection collar to be pulled up to just below the helmet
- With radio pocket and straps for handheld microphone on the left side
- Patch side pockets under the right side pocket flap with Velcro strap and snap button for attaching gloves
- 15 x 2.5 cm (5.9 x 1 in) Velcro patch for attaching a name tag
- With breathable, patched reflective stripes on the front and back
- Back length 82.5 cm (32.5 in) (size 52-54 C)

Available sizes: 40-42 to 68-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180),

D (180-188), E (188-196)

Weight: 0.9 kg (approx. 2.0 lb) (size 52-54 C)

Models	Order no. jacket
GAROS G10 TR: Wildfire and technical rescue color: gold/yellow	140850
GAROS G10 TR: Wildfire and technical rescue color: black-blue/yellow	140852
GAROS G10: Wildfire, color: gold	140854
GAROS G10: Wildfire, color: black-blue	140856

Jacket accessories

- 1405966 Name tag stitched on Velcro**
Approx. 15 x 3 cm (5.9 x 1.2 in), specify tag and lettering color.
- 1413523 Premium additional equipment**
Includes right chest pocket, cuffs, adjustable collar

Rear lettering

In capital letters, lettering height 4 cm (1.6 in). Specify letter coloring when ordering!

- 140949 Attached directly to the back of the jacket**
- 1410621 Fleece part for attaching a back label**
Size: 8 x 38 cm (3.2 x 15 in)
- 141062 Attached to a Velcro**
Back patch dimensions: 8 x 38 cm (3.2 x 15 in)

Trousers design

- Comfortable, ergonomic trousers with Velcro straps on the waistband for attaching removable suspenders (optional)
- Elastic waistband for perfect adjustment
- Fly with zip and Velcro fastener, covered by a flap
- Two side pockets
- 15 x 2.5 cm (5.9 x 1 in) Velcro patch for attaching a name tag to the left side pocket flap
- Two internal side pockets, closed with zippers
- Ergonomically preformed knees with reinforcement, removable knee pads that can be ordered as an option
- Reinforcements made of black, flame-retardant, silicon-carbon-coated paraaramid fabric at the trouser hem
- Breathable, patched reflective stripes

Available sizes: 40-70

Each in 5 lengths*: A (156-164), B (164-172), C (172-180), D (180-188), E (188-196)

Weight: approx. 0.9 kg (2.0 lb) (size 50 C)

Outer fabric	Order no. trousers
GAROS G10 TR: Wildfire and technical rescue color: gold/yellow	140851
GAROS G10 TR: Wildfire and technical rescue color: black-blue/yellow	140853
GAROS G10: Wildfire, color: gold	140855
GAROS G10: Wildfire, color: black-blue	140857

Accessories for trousers

1406428 Suspenders for trousers

Available in 5 lengths: A, B, C, D, E

1405966 Name tag stitched on Velcro

Approx. 15 x 3 cm (5.9 x 1.2 in), specify tag and lettering color.

1413524 Premium equipment

Incl. belt loops, knife pocket on the right side, leg width adjustment

148541 Knee pads for retrofitting

*Size table please refer to page 51.



140856 / 140857



140851



140857



OPTIMUM CARE OF PROTECTIVE CLOTHING

Correct and regular cleaning of protective clothing is all the more important. In addition, should washing be careless or be carried out incorrectly, the protective function of the suit may suffer. However, if a few instructions regarding cleaning, care and storage are followed, keeping the protective clothing neat and functional is straightforward.

1. WASHING

Turnout suits should be cleaned using a commercial washer extractor, or by a professional laundry. Subject to certain limitations, an in-house washing machine can also be used, although the following points have to be taken into account during washing:

- Wash fire service clothing separately (apart from other clothing items)
- Empty the pockets before washing
- Completely close jackets (all zips and hook and eye strip fasteners)
- Turn the jacket inside out the right way (so that the face fabric is on the outside)
- Cover the open hook sections of the strip fasteners
- Remove any spring hooks from the pockets
- Use three rinses, spin at intervals
- Only use mild wash cycles; max. 60 °C (140 °F)
- Use standard fine washing agents (no fabric conditioners, no heavy duty detergents)

2. DRYING

Turnout suits must be air-dried. Wherever possible, driers should not be used. However, if a dryer is used, ensure that drying is gentle at a maximum temperature of 80 °C (176 °F).

3. IRONING

Turnout suits are to be ironed at medium temperature. Expert tip: In order to protect the reflective material, always place a cloth between the suit and the iron.

4. IMPREGNATION

If a suit no longer exhibits a water-repellent effect, it has to be re-impregnated. Impregnate protective clothing after every second wash. If chemical cleaning is used, re-impregnation is necessary without exception. Do not use standard impregnation sprays for fire service clothing.

5. STORAGE

Care must be taken that the clothing is stored in a dry and well-ventilated place. Textile items should not be exposed unnecessarily to bright sunlight. Open clothing racks are to be safeguarded against direct sunshine

Rosenbauer recommends professional care by a local laundry. Choose a local specialist who has adequate experience with washing and impregnation of firefighting clothing. And make sure to observe the recommended cleaning and maintenance instruction indicated in our user information attached to the garment!

Recommended impregnation agent

140430

Impregnation agent TX Direct Wash-in

Recommended by Gore-Tex und Sympatex. Is added to the final rinse. No treatment in a drier required. Contains: 1 l (0.3 US gal)

PROTECTIVE HOODS

158158 Protective hood

Certified as to NFPA 1971, 2007 edition UL listed. 100% NOMEX® double layer hood, single layer pieced bib style, fully hemmed face opening and bottom, flat-lock and seam design, sewn with NOMEX® thread. One size fits all. This protective hood is not CE-marked and not certified according to the European PPE Directive. **It is not allowed to deliver this product within European Union!**
Color: white. Weight: approx. 0.2 kg (0.4 lb)



158158

158163 Protective hood

Certified according to EN 13911:2017. Heat and fire retardant hood, made of 100% NOMEX® III, approx. 245 g/m² (7.2 oz/yd²) material. Double layer hood, single layer piece bib style. Fully hemmed face opening and bottom. Sewn throughout with KEVLAR® and NOMEX® thread. Can be worn in combination with fire helmets and SCBA facemasks. One size fits all.
Color: navy blue. Weight: approx. 0.1 kg (0.2 lb)



158163

158164 Protective hood, made of PBI gold

Certified according to EN 13911: 2017. Heat and fire retardant hood, made of PBI gold approx. 200 g/m² (6 oz/yd²), with inner layer made of Kermel/Lenzing FR, approx. 220 g/m²(6.5 oz/yd²) material. Double layer hood, single layer piece bib style. Fully hemmed face opening and bottom. One size fits all.
Color: yellow. Weight: approx. 0.1 kg (0.2 lb)



158164

139140 Firefighters rolling gear kit bag

Multiple pockets to hold and separate turnout gear, helmet, gloves etc. Main hold delivers full cargo capacity. One zippered pocket. Separate dirty laundry bag. Two lateral pockets for manuals, syllabuses etc., zippered outside front pocket. Industrial grade size 10 double-pull zippers, made of metal. Bearing skate wheels and end strap.

- Made of nylon, double coated. Repels water and resists abrasion tears, scuffs and punctures
- Total capacity 115 l (30.4 US gal)
- Color: black/gray with red trimming
- Dimensions: 780 x 400 x 380 mm (30 x 16 x 15 in)
- Weight: approx. 2 kg (4.4 lb)



139140



142750



142760



142740



FIREFIGHTING GLOVES SAFE GRIP 3

Certified according to EN 659:2008.

These protective gloves for firefighters provide excellent heat and flame protection, excellent touch sensitivity and optimal fit.

Excellent materials

- The back of the glove is comprised of premium aramid combinations that are characterized by extremely high impact strength, flame and heat resistance, and resilience to chemicals. A para-aramid non-woven material was applied to the rear for extra heat and cut protection.
- Due to the Gore-Tex® X-TRAFIT technology, the gloves are water- and windproof and breathable.
- As all three layers in the glove are interconnected, there is no danger of material becoming loose or slipping when putting on or taking off the gloves.
- The palm side is made of new excellent silicon-carbon-mineral-coated NOMEX KEVLAR® doubleface fabric for high abrasion, puncture and cut resistance and anti-slip also on wet and smooth surfaces.

Features

- Flexible wristlet adjustment
- With pleats on the fingers for excellent movement and optimal fit
- Adjustable hook and pile fastening
- Polyurethane impact protectors on the back of the hand with additional heat insulation
- Cuff with 3M yellow/silver/yellow reflective stripes and silver reflective braid
- Hook and eye for connection
- Machine washable up to 60 °C (140 °F)

Sizes: 6–12

Length: approx. 350 mm (137 in)

EN 659:2008 performance classes	
Requirements	Level
Abrasion resistance (EN 389)	4
Cut resistance (EN 388)	4
Tear resistance (EN 388)	4
Puncture resistance (EN 388)	3
Burning behavior (EN 407)	4
Convective heat resistance (EN 367/407)	✓
Radiant heat resistance (EN ISO 6942)	✓
Contact heat resistance (EN 702)	✓
Shrinkage (ISO 17493)	✓
Dexterity (EN 420)	4
Removal of gloves (EN ISO 20344)	✓
Water permeability (EN 344-1)	✓
Fluid permeability (ISO 15383)	✓
Permeability of liquid chemicals (EN 368)	✓

142750 SAFE GRIP 3 dark blue with cuff

142760 SAFE GRIP 3 yellow with cuff

142740 SAFE GRIP 3 dark blue with wristlet

GLOROS T1 GLOVES FOR TECHNICAL RESCUE OPERATIONS

Certified according to EN 388:2008 and EN 407:2020 contact heat level 2, up to 250 °C (480 °F).

The GLOROS T1 has been specially developed for use in technical rescue operations. Certified according to EN 388, it offers the best protective properties against mechanical hazards such as cuts, stabs, abrasions, etc. Whether you're working on vehicles that have been involved in an accident or other fire brigade activities - the GLOROS T1 is the right glove. However, these gloves do not offer protection against chemical, electrostatic, and thermal hazards. Specifically, this glove is not intended for use in fire operations (the proven SAFE GRIP 3 models are available for this). However, the GLOROS T1 offers a certain basic protection against contact heat up to +250 °C (480 °F) (according to EN 407).

High-quality materials

- Palm made of black elastane-polyamide mixture with silicone print for excellent grip on smooth and wet surfaces
- Back of red nylon blended fabric with spandex and neoprene over the knuckles
- Lining made of cut-resistant KEVLAR® with fiberglass

Design

The GLOROS T1 ensures maximum comfort and tactility thanks to its special design and well thought-out details (movement-oriented finger folds, interrupted silicone coating on the palms, neoprene inserts on the knuckles, etc.). The cut-resistant insert made of KEVLAR® completely encloses the fingers, providing all-round cut protection (not just in the palm area). A rubber band strapping prevents glass fragments and dirt from entering.

The gloves are delivered with a robust metal connection carabiner.

Available sizes: 5-13

Length: approx. 270 mm (10.7 in)

Machine washable up to +40 °C (104 °F)

Performance levels according to EN 659:2016 and EN 407:2020	Performance level
Abrasion resistance (EN 388)	4
Cut resistance (EN 388)	5
Tear resistance (EN 388)	4
Penetration resistance (EN 388)	3
Cut resistance (EN ISO 13997)	D
Dexterity (EN 420)	5
Contact heat (EN 407)	2

142670 GLOROS T1



142670



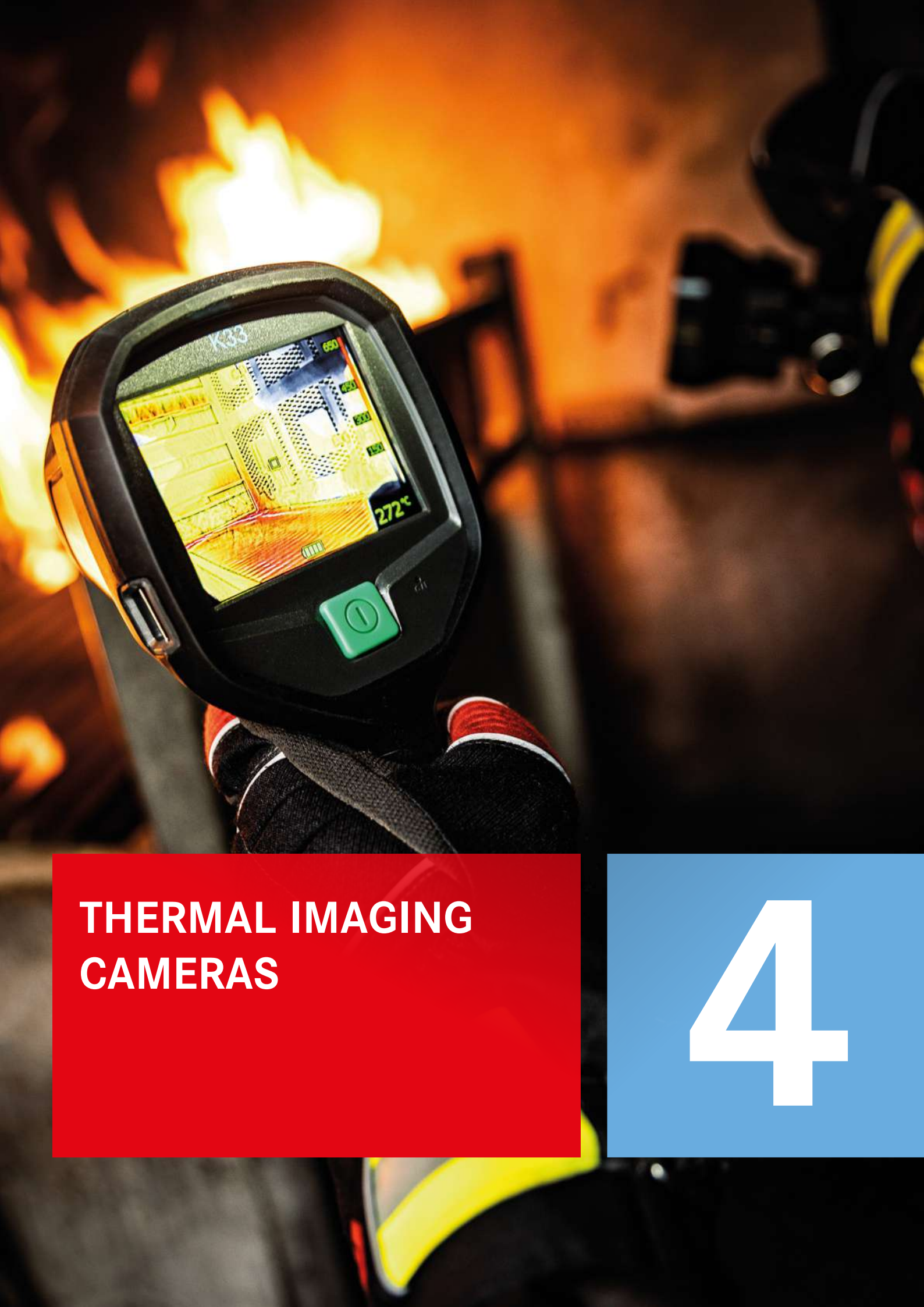
High mechanical protective properties



Perfect grip and high slip resistance



Excellent tactile qualities



**THERMAL IMAGING
CAMERAS**

4



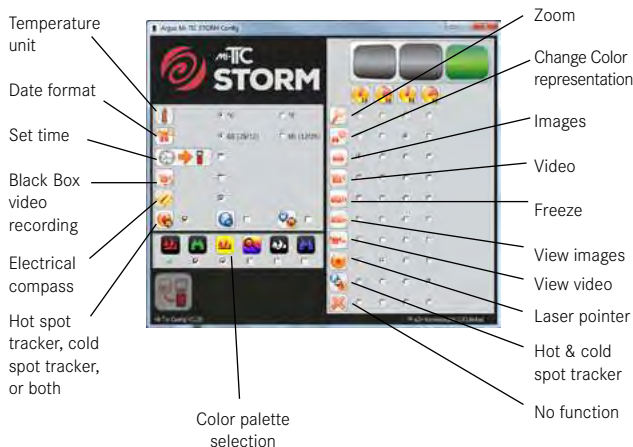
ARGUS Mi-TIC E



ARGUS Mi-TIC S



Software configuration tool



MI-TIC THERMAL IMAGING CAMERAS

Mi-TIC thermal imaging cameras are the world's smallest, high-resolution thermal imaging cameras for firefighting operations. The cameras have a crystal clear thermal image and an exceptional dynamic range: Extremely hot areas can be observed without white-out, while people who, for example, have a very low body temperature are also detected. Perfect for search and rescue operations!

Thanks to their compact dimensions and low weight, the Mi-TIC cameras are among the smallest and handiest thermal imaging cameras available. They fit perfectly and comfortably in your hand and can be placed in every pocket. The new lithium-iron-phosphate technology makes it possible to keep the cameras operational for 3 hours - with over 2,000 charging cycles. The batteries are fully resistant to high temperatures.

Functions and performance characteristics

- Image and video recording for follow-up and training purposes
- Storage space for up to 1,000 images*
- Black Box video recording for automatic filming
- 7 application-specific color modes to simplify image interpretation*
- DSE (Dynamic Scene Enhancement) technology to increase the contrast between fire and important features with lower temperatures (e.g., emergency exits, obstacles)
- Freeze function to minimize exposure time while investigating potentially high temperature areas on scene (e.g., attic)*
- Explosion protection
- NFPA certification
- Software configuration tool for customizing the key functions*
- Space-saving in-vehicle charger

Compliance with standards and guidelines 1801:2021

- Performance: NFPA
- Safety: IEC 62368-1:2014, UL 121201 / CSA C22.2 No. 213:2017 Class I, Div 2, Groups C, D T4, Class II, Div 2, Groups F, G T4
- Emission: EN 55032:2015, Class A, EN 54098:2010, FCC CFR 47, Section 15b, ICES 003:2017, AUS/NZ 4251.1
- Vibration and shock: BS EN 60721-3-2 Class 2M3
- RoHS: All parts of the camera comply with EU Directive 2011/65/EG

Environmental data

- Thermal conditions: The camera is designed to operate at $-20\text{ }^{\circ}\text{C}$ ($-4\text{ }^{\circ}\text{F}$) to $+85\text{ }^{\circ}\text{C}$ ($+185\text{ }^{\circ}\text{F}$) and to withstand temperatures of $+150\text{ }^{\circ}\text{C}$ ($+300\text{ }^{\circ}\text{F}$) for 15 minutes and $+260\text{ }^{\circ}\text{C}$ ($+500\text{ }^{\circ}\text{F}$) for 5 minutes
- Sealing: IP67
- Drop height: The camera can withstand a drop onto concrete from 2 m (6.5 ft)
- Storage: To achieve a maximum effective usage life, the storage temperature when not in use should be between $-20\text{ }^{\circ}\text{C}$ and $+40\text{ }^{\circ}\text{C}$ ($-4\text{ }^{\circ}\text{F}$ and $+104\text{ }^{\circ}\text{F}$)

Scope of delivery

- Camera
- 2 x lithium-iron-phosphate batteries (3 h)
- Docking station for holding the camera and charging 2 battery units, suitable for 12 V, 24 V and 230 V
- Self-retracting attachment clip
- USB connection cable for PC/laptop
- Quick-start guide

*Three-button control models

Warranty:

- Mi-TIC E, Mi-TIC EL: camera 3 years, battery 5 years, sensor and lens 10 years
- Mi-TIC 320, Mi-TIC S: camera 5 years, battery 5 years, sensor and lens 10 years

7 color representations*

- EVALUATION mode: Early coloring to estimate the situation at a distance from the fire area
- FIRE mode: High dynamic range for fully developed high-temperature fires
- ANALYSIS mode: Red coloring of the hottest points of the fire area - for analysis after the extinguishing work has been completed and to minimize the risk of reignition
- INSPECTION mode: Full color spectrum for preventive maintenance of equipment and buildings
- WH mode: White hot for general searches without temperature coloring
- MISSING PERSONS mode: Blue coloring of the hottest spots in the fire area and optimized contrast for off-road searches and traffic accident incidents
- FIRE PLUS mode: High dynamic range and imaging with spot temperature measurement for interior structural firefighting

Mi-TIC E

The lightest and most affordable NFPA 1801-certified thermal imaging camera. Unique design: 765 g (1.7 lb); light and portable. 2.7" display.

4 1133264 Mi-TIC E with single-button operation (yellow)

4 1133260 Mi-TIC E with three-button operation (yellow)

Mi-TIC EL

Larger 3.5" display: for a clearer view of the fire scene. High dynamic temperature range up to +760 °C (+1,400 °F) for detailed images in everyday firefighting operations.

4 1133268 Mi-TIC EL with single-button operation (yellow)

4 1133270 Mi-TIC EL with three-button operation (yellow)

Mi-TIC 320

Extended dynamic temperature range up to +1,100 °C (+2,012 °F) for a more detailed display of larger and hotter fires. Hot/cold spot tracker. 2.7" display.

4 1133272 Mi-TIC 320 with three-button operation (red)

Mi-TIC S

The most modern thermal imaging camera for firefighting. Larger (3.5") display: for a clearer view of the fire scene. Weight: 870 g (1.9 lb). Laser pointer: For more efficient communication. Electronic compass: For simplified orientation.

4 1133261 Mi-TIC S with three-button operation (red)

Accessories for the Mi-TIC E and S

Replacement batteries

When fully charged, the battery can power the thermal imager for 3 hours, and uses Li Fe PO⁴ cells.

4 11332301 Battery for 3 hours of operation

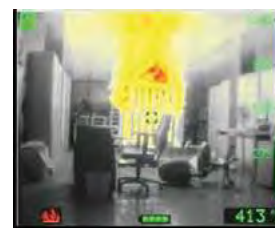
4 1133236 Empty housing for AA dry batteries

4 1133241 Hard case

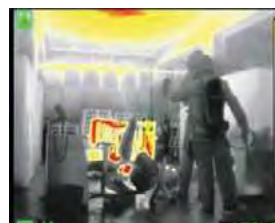
*Three-button control models



EVALUATION mode



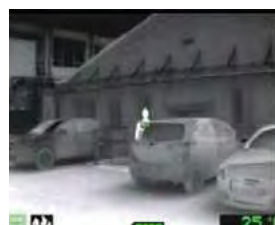
FIRE mode



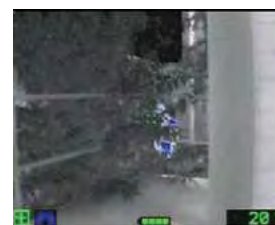
ANALYSIS mode



INSPECTION mode



WH mode



MISSING PERSONS mode



4 113323301



4 1133236

Technical data				
Model	Mi-TIC E	Mi-TIC EL	Mi-TIC 320	Mi-TIC S
Mechanical data				
Camera dimensions (H x W x D):	203 x 96 x 71 mm (8.0 x 3.7 x 2.8 in)	216 x 110 x 82 mm (8.5 x 4.3 x 3.2 in)	203 x 96 x 71 mm (8.0 x 3.7 x 2.8 in)	216 x 110 x 82 mm (8.5 x 4.3 x 3.2 in)
Camera weight:	600 g (1.3 lb) without battery 765 g (1.7 lb) with standard battery	695 g (1.5 lb) without battery 870 g (1.9 lb) with standard battery	580 g (1.3 lb) without battery 755 g (1.7 lb) with standard battery	695 g (1.5 lb) without battery 870 g (1.9 lb) with standard battery
Charger dimensions (H x W x D):	167 x 112 x 120 mm (6.5 x 4.4 x 4.7 in)			
Charger weight:	600 g (1.3 lb)			
Camera housing:	Radel® R-5100 and Santoprene®			
LCD window:	Ultrason® E 2010 HC			
LCD shock protection:	Santoprene®			
Lens mount:	Radel® R-5100 and Santoprene®			
Lens window:	Germanium with durable coating			
Detector				
Temperature range:	-40 °C to +760 °C (-40 °F to +1,400 °F)		-40 °C to +1,100 °C (-40 °F to +2,012 °F)	
Spot temperature:	-40 °C to +760 °C (-40 °F to +1,400 °F)		-40 °C to +1,100 °C (-40 °F to +2,012 °F)	
Sensor type:	Uncooled microbolometer			
Sensor material:	Amorphous silicon (aSi)			
Resolution:	384 x 288 pixels			
Pixel size:	17 µm			
Spectral sensitivity:	7.5 to 14 µm			
MDTD (overall sensitivity of the camera):	60 mK	50 mK	60 mK	50 mK
NETD:	<50 mK			
Image refresh rate:	60 Hz			
Lens				
Lens material:	Germanium compound			
Focal length:	1 m (3.3 ft) to infinity, optimized for 4 m (13.1 ft)			
Aperture:	f/1.0			
Field of vision:	50° horizontal, 37.5° vertical, 62° diagonal			
Display				
Size:	69 mm (2.7")	90 mm (3.5")	69 mm (2.7")	90 mm (3.5")
Type:	Color TFT, active matrix LCD, high-resolution, for industrial applications			
Pixel format:	QVGA 320 x 240 (each pixel RGB format, 230,400 pixels total)			
Video input:	Digital output stage, sensor synchronized			
Electrical data				
Power consumption:	<3 W (typical)			
Switch-on time:	5 seconds (typical)			
Battery type:	Lithium iron phosphate rechargeable battery			
Battery capacity:	1,100 mAh, 6.6 V			
Operating time:	More than 3 hours at an ambient temperature of +22 °C (+71.6 °F)			
Standard battery charge time:	Less than 3 hours			
Battery charging cycles:	Over 2,000 cycles			
Battery charging temperature:	+5 °C to +40 °C (+41 °F to +104 °F)			
Charger input voltage:	11 V - 30 V DC (12 V and 24 V vehicle systems)			
Charger operating temperature:	0 °C to +40 °C (+32 °F to +104 °F)			

FLIR THERMAL IMAGING CAMERAS

The wide FLIR thermal imaging camera range is characterized by a razor-sharp thermal image with top-class details. This is achieved through digital image optimization directly within the cameras through the MSX® (K1 & K2) and FSX™ (Kxx series) systems. This gives firefighters much more detailed information of the surroundings at the crucial moments.

FLIR K1

The compact FLIR K1 is the perfect camera for lieutenants and captains, providing a full all-round view of the scene.

Technical data:

- 160 × 120 pixel IR resolution
- Digital image optimization with MSX®
- Field of view: 57° × 44°
- Backlit 2.4" LCD display with 320 × 240 pixels
- 300 lm LED lights
- Measurement range:
- -10 °C to +140 °C, -10 °C to +400 °C
(+14 °F to +284 °F, +14 °F to +752 °F)
- Integrated 3.7 V lithium-ion battery
- Dimensions: 208 × 85 × 65 mm (8.2 x 3.3 x 2.6 in)
- Sealing: IP67
- Drop height: 2 m (6.6 ft)
- Weight: 410 g (0.9 lb)

Scope of delivery:

FLIR K1 camera, wrist strap, USB-C to USB-A cable, belt pouch, quick-start guide

FLIR K1 warranty*:

2 Years parts and labor
10 Years detector

*only applies if the camera is registered online

41133290 FLIR K1

FLIR K2

The K2 combines quality and reliability with an attractive price/performance ratio. It also impresses with its low weight.

Technical data:

- 160 x 120 pixel IR resolution
- Digital image optimization with MSX®
- Field of view 47° x 35°
- Backlit 3" LCD display with 320 x 240 pixels
- Measurement range: -20 °C to +150 °C, 0 °C to +500 °C
(-4 °F to 302 °F, +32 °F to +932 °F)
- 2 x lithium-ion batteries, > 4 hours operating time
- Dimensions: 250 x 105 x 90 mm (9.8 x 4.1 x 3.5 in)
- Temperature resistance: +150 °C (+302 °F) for up to 10 minutes
+260 °C (+500 °F) for up to 3 minutes
- Sealing: IP67
- Drop height: from 2 m (6.5 ft) onto a concrete floor
- Weight incl. battery: 700 g (1.5 lb)

Scope of delivery:

FLIR K2, batteries (2 pcs.), battery charger, carrying strap, power supply unit, USB cable, quick-start guide,

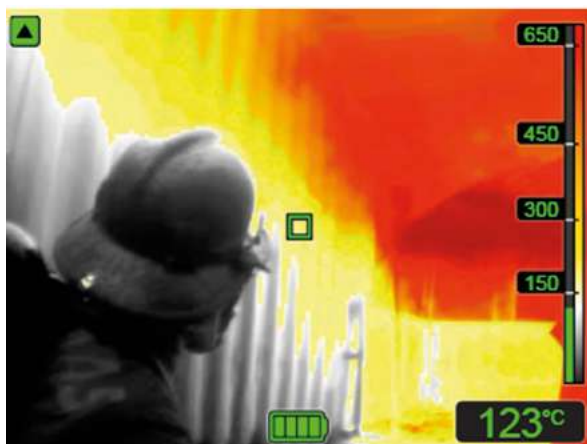
41133291 FLIR K2



41133290



41133291



Comparison without/with FSX™



4 1133292 / 4 1133294
with single-button operation



4 1133293 / 4 1133295 / 4 1133296
with 3-button operation

FLIR Kxx Series

The models of the Kxx series are extremely robust and durable - without compromise!

Technical data for all Kxx models:

- Digital image optimization with FSX™
- Field of view 51° x 38°
- Backlit 4" LCD display, protected with tempered glass, scratch-resistant
- Dimensions: 120 x 125 x 280 mm (4.7 x 4.9 x 11 in)
- Measurement range: -20 °C to +150 °C, 0 °C to +650 °C (-4 °F to +302 °F, +32 °F to +1,202 °F)
- Lithium-ion battery > 4 hours operating time
- Temperature resistance: +150 °C (+302 °F) up to 15 mins +260 °C (+500 °F) up to 5 mins
- Sealing: IP67
- Drop height: from 2 m (6.5 ft) onto a concrete floor
- Camera weight including battery: <1,100 g (<2.4 lb)

Scope of delivery:

Kxx camera, batteries (2 pcs.), battery charger, transport case, neck strap, self-retracting carrying cord, power supply, USB cable, quick start guide, FLIR K65 additionally with Torx T25

FLIR K33

240 x 180 pixels, 1 button, 1 thermal image mode

4 1133292 FLIR K33

FLIR K45

240 x 180 pixels, 3 buttons, 5 thermal image modes, photo function, 2x zoom

4 1133293 FLIR K45

FLIR K53

320 x 240 pixels, 1 button, 1 thermal image mode, photo & video function

4 1133294 FLIR K53

FLIR K55

320 x 240 pixels, 3 buttons, 5 thermal image modes, photo & video function, 2x zoom

4 1133295 FLIR K55

FLIR K65

Functions and features as the K55 but includes NFPA 1801-2021 certificate. Ex certified to ANSI/ISA 12.12.01-2015 and conforms to Class I Division 2 Groups C and D, Class II Division 2 Groups F and G, Temperature code T4/T135°C

4 1133296 FLIR K65

Guarantee* for all Kxx models and also the K2*:

- 2 Years battery
- 5 Years parts and labor
- 10 Years detector

*only applies if the camera is registered online

Accessories for FLIR thermal imaging cameras

- 4 1133319** Vehicle charger for FLIR K1
- 4 1133302** Vehicle charger for FLIR K2
- 4 1133301** Vehicle charger for FLIR Kxx
- 4 1133303** Lithium-ion battery for FLIR Kxx

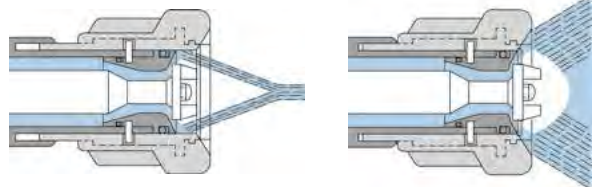
Other FLIR accessories available on request.



**NOZZLES
PORTABLE MONITORS**

5

Nozzles



Full jet

Spray jet



Full jet



Spray jet



Protective shield

NOZZLES

The water is fed through a ring-shaped nozzle, whereby a hollow stream of water is produced. In contrast to combination spray nozzles, the water flow is not interrupted when changing from full to spray jet. A full jet from a nozzle is more stable because it does not rain out easily. This results in a high throw range. Usually stream patterns and flow rates are continuously adjustable.

Stream patterns

Full jet

- Large throw range, which enables working from a safe distance
- High kinetic energy to extinguish ember pockets

Spray jet

- Improved surface cooling compared to the full jet
- Generally causes less water damage compared to the full jet
- Can be used when working with small safety distances in high and low voltage systems

Protective shield

- Fine of water droplets and a wide scattering angle provide a broad water shield
- Protects the crew from radiant heat



5

RTE FX NOZZLE

The Rosenbauer RTE FX nozzle combines uncompromising technology, state-of-the-art material and manufacturing quality, and a brand new, innovative operating concept. The cubic design allows quick and easy handling. Combined with many optimized details, the nozzle becomes a versatile and indispensable instrument in operations. The RTE FX is made of anodized aluminum, stainless steel and fiberglass reinforced plastic, and is designed as a maintenance-free operational resource. This makes it a highly functional and cost-effective product.

Intuitive operation

The cubic design is form-fitting and enables emergency services to choose the right settings quickly and easily, even in zero visibility. This means it is easy to operate and requires very little training.

Fast Attack Position

The Fast Attack Position is enabled when the controls for flow and stream shape are set parallel. It is the optimal initial position for indoor fire attacks. This means that you are well prepared for everything that awaits from the very first moment.

Perfect adjustment

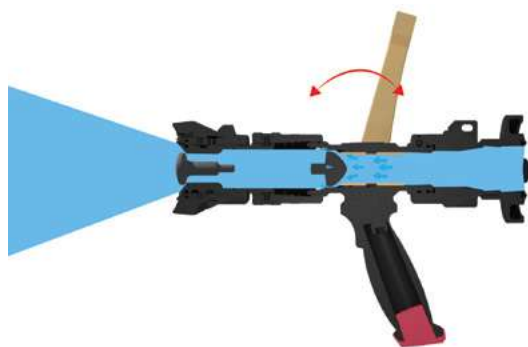
A slide valve enables very fine regulation of the flow rate. The further the handle is moved to the rear, the greater the volume. In addition, the slide valve ensures a perfectly consistent stream pattern regardless of the position of the on/off handle.

A firm grip

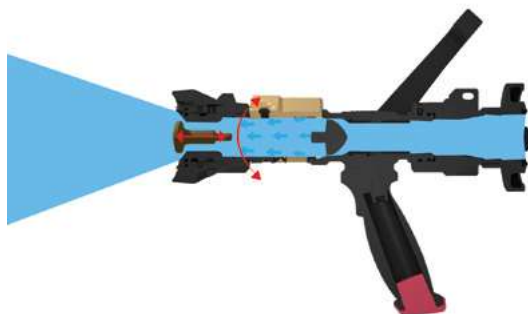
The design and surface of the new FX ERGO grip have been optimized to ensure the best possible grip when operating with gloves. It is equipped with an additional grip protector made of a shock-absorbing material at the end of the grip.



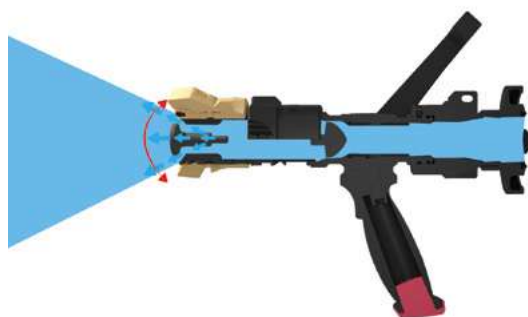
RTE FX



Slide valve for perfect spray pattern independently from on/off handle position



Intuitive handling I: Flow rate adjustment with fast attack position (235 l/min) in case of aligned surfaces



Intuitive handling II: Spray pattern adjustment with fast attack position (45° spray pattern) in case of aligned surfaces



Fast Attack Position when all surfaces are aligned and detented flow positions for additional flow control

RTE FX nozzles according to EN

Type	RTE FX 235 EN	RTE FX 400 EN	RTE FX 750 EN
Adjustable flow rate in l/min (US gpm) approx.:	40 (11) 130 (34) 235 (62)	130 (34) 235 (62) 400 (106)	360 (95) 550 (150) 750 (200)
Max. jet distance:	approx. 39 m (128 ft)	approx. 46 m (151 ft)	approx. 49 m (161 ft)
Length:	32 cm (12.6")	32 cm (12.6")	36 cm (14.2")
Weight:	2.2 kg (4.85 lb)	2.2 kg (4.85 lb)	2,6 kg (5.7 lb)

Flow rate and jet distance performance indicators are provided using a nozzle operating pressure of 6 bar (87 psi) bar as reference. Length and weight are indicated with the Storz couplings.

RTE FX EN

2790002 RTE FX 235 EN STORZ C
2790004 RTE FX 235 EN BS 2 1/2" male
2790003 RTE FX 235 EN NH 1 1/2" female

2790502 RTE FX 400 EN STORZ C
2790506 RTE FX 400 EN STORZ B
2790504 RTE FX 400 EN BS 2 1/2" male
2790503 RTE FX 400 EN NH 1 1/2" female

2790707 RTE FX 750 EN STORZ B
2790708 RTE FX 750 EN BS 2 1/2" male
2790709 RTE FX 750 EN NH 2 1/2" female

Other coupling variants available upon request.

RTE FX nozzles according to NFPA

Type	RTE FX 230 NFPA	RTE FX 475 NFPA	RTE FX 750 NFPA
Adjustable flow rate in l/min (US gpm) approx.:	50 (13) 150 (40) 230 (60)	115 (30) 230 (60) 475 (125)	360 (95) 550 (150) 750 (200)
Max. jet distance:	approx. 42 m (138 ft)	approx. 49 m (161 ft)	approx. 50 m (164 ft)
Length:	32 cm (12.6")	32 cm (12.6")	36 cm (14.2")
Weight:	2.2 kg (4.85 lb)	2.2 kg (4.85 lb)	2.6 kg (5.7 lb)

Flow rate and jet distance performance indicators are provided using a nozzle operating pressure of 7 bar (100 psi) as reference. Length and weight are indicated with the Storz couplings.

RTE FX NFPA

2790202 RTE FX 230 NFPA STORZ C
2790204 RTE FX 230 NFPA BS 2 1/2" male
2790203 RTE FX 230 NFPA NH 1 1/2" female

2790602 RTE FX 475 NFPA STORZ C
2790606 RTE FX 475 NFPA STORZ B
2790604 RTE FX 475 NFPA BS 2 1/2" male
2790603 RTE FX 475 NFPA NH 1 1/2" female

2790702 RTE FX 750 NFPA STORZ B
2790704 RTE FX 750 NFPA BS 2 1/2" male
2790703 RTE FX 750 NFPA NH 2 1/2" female

Other coupling variants available upon request.

Accessories

279004 Medium foam attachment FX
279005 Low expansion foam attachment FX



5

SELECT FLOW NOZZLES

The Rosenbauer SELECT FLOW nozzle enables manual 4-stage adjustment of the water flow rate via an adjusting ring. This achieves a maximum extinguishing effect with minimal water consumption.

1. Spinning teeth made of stainless steel

For best fog pattern when using “spray jet” and “protective-shield” setting.

2. Stream pattern adjustment

Within 100° rotation adjustment from straight stream to protective shield.

3. Ergonomic pistol grip

For better handling and reduced fatigue when wearing fire fighting gloves.

4. Shock-resistant pattern adjustment bumper

With integrated pointer. The flash over position at 45° (pointer at 12 h) is easy to detect even when wearing fire fighting gloves.

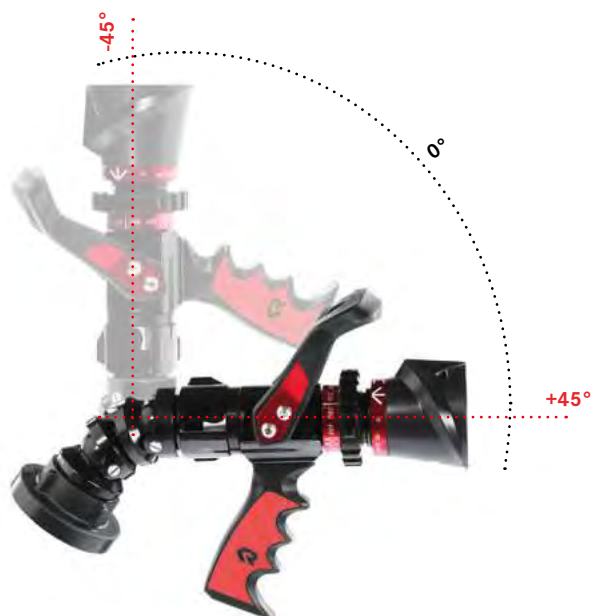
5. Ergonomic on/off handle

Glass-fibre reinforced and additionally light alloy reinforcements on both sides.

6. High-quality materials

Body made of hard anodised light alloy, water-carrying components made of corrosion-resistant materials.





**Swivel joint for swiveling motions
from -45° up to +45°**



SELECT FLOW nozzles according to EN

Type	RB 99 EN	RB 100D EN	RB 101 EN
Adjustable flow settings in l/min (US gpm):	17 (4.5) 30 (8) 80 (21) 130 (34)	45 (12) 85 (22) 130 (34) 235 (62)	130 (34) 230 (60) 300 (79) 400 (106)
Max. throwing range approx.:	32 m (105 ft)	36 m (115 ft)	44 m (145 ft)
Length:	30 cm (12")	30 cm (12")	31 cm (12.5")
Weight:	2 kg (4.4 lb)	2 kg (4.4 lb)	2.2 kg (4.8 lb)

The performance details of the flow settings and the throw range for all SELECT FLOW EN nozzles are in accordance with European specifications, provided in reference to an operating pressure of 6 bar (87 psi). Length and weight are measured with Storz C coupling. All SELECT FLOW branch pipes are suitable for a maximum operating pressure of 16 bar (230 psi). The indicated throw ranges and spray angles are based on the maximum flow setting.

All nozzles are available without couplings (female thread BSP) or individually fitted with Storz, British Standard or NH-couplings. Other coupling systems are available upon request.

SELECT FLOW RB 99 EN

- 279510** With coupling Storz C
- 279522** With coupling BS 2 ½" male
- 279525** With coupling NH 1 ½" female

SELECT FLOW RB 100D EN

- 27954901** With coupling Storz C

SELECT FLOW RB 101 EN

- 279570** With coupling Storz C
- 279585** With coupling BS 2 ½" male
- 279590** With coupling NH 1 ½" female

Swivel joint for SELECT FLOW nozzles

Enables swiveling motions up to 45° in every direction. The swivel is ideal for cooling down the flue gas of an interior fire, since the hose does not have to be pulled along with upward motion. In case of outdoor attacks, the swivel is used as an elbow support. Movement is possible in every direction.

- 27954904** RB 100D EN with coupling Storz C, swivel joint 45°
- 279574** RB 101 EN with coupling Storz C, swivel joint 45°

SELECT FLOW

SELECT FLOW nozzles according to NFPA

The Rosenbauer SELECT FLOW nozzle type NFPA conforms to all aspects of NFPA 1964:2008. It permits multiple flow setting using a selection control ring with detents.

Type	RB 99 NFPA	RB 100 NFPA	RB 101 NFPA
Adjustable flow settings in l/min (US gpm):	19 (5)	50 (13)	115 (30)
	37 (10)	100 (25)	230 (60)
	90 (24)	150 (40)	360 (95)
	150 (40)	230 (60)	475 (125)
Max. throwing range:	39 m (125 ft)	40 m (130 ft)	47 m (150 ft)

The flow settings and the throw range for the types SELECT FLOW RB 99 NFPA, RB 100 NFPA, RB 101 NFPA are shown with reference to an operating pressure of 7 bar (100 psi), Length and weight depending on the type of the nozzle and the coupling used. From 1.7 kg (3.7 lb) for the RB 99 NFPA (with 1" BSP female) up to 3.2 kg (7 lb) with a Storz B coupling. All SELECT FLOW branch pipes are suitable for a maximum operating pressure of 16 bar (230 psi). The indicated throw ranges and spray angles are based on the maximum flow setting.

All nozzles are available without couplings (female thread BSP) or individually fitted with Storz, British Standard or NH-couplings. Other coupling systems are available upon request.

SELECT FLOW RB 99 NFPA

27924705 With coupling BS 2 ½" male
279248 With coupling NH 1 ½" female

SELECT FLOW RB 100 NFPA

279229 With coupling Storz C
27922807 With coupling BS 2 ½" male
27922804 With coupling NH 1 ½" female

SELECT FLOW RB 101 NFPA

27923005 With coupling Storz C
27923002 With coupling BS 2 ½" male
27923003 With coupling NH 1 ½" female



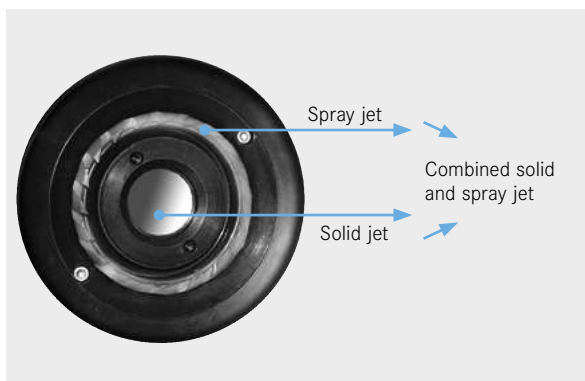
Storz C



B. Inst. 1 ½" or BS 2 ½" male



NH 1 ½" female



Combined solid and spray jet

PRO JET NOZZLES

- Providing a combination of solid stream and fog pattern at the same time or independently
- Switch from solid to fog stream without shutdown
- Twist shutoff of the fog stream – ball shutoff of the straight stream
- Operates efficiently at pressure as low as 3.5 bar (50 psi)

Versatile applications

- Indoor and outdoor use
- Suitable for CAFS
- Foam attack
- Cooling
- Penetration of the burning material
- Water curtain

Type	PRO JET I	PRO JET II
Adjustable flow settings in l/min (US gpm):	approx. 180* (47) approx. 370** (100)	approx. 420* (110) approx. 680** (190)
Max. throwing ranges approx.:	34 m (110 ft)	40 m (130 ft)
Length:	30 cm (12")	31 cm (12.5")
Weight:	2 kg (4.4 lb)	3 kg (6.6 lb)

The performance details of the flow settings and the throw range are provided in reference to an operating pressure of 3.5 bar (50 psi) at the nozzle. Length and weight with the Storz C or Storz B coupling. All PRO JET branch pipes are suitable for a maximum operating pressure of 7 bar (100 psi).

* for solid jet

** for combined jet

All nozzles are available without couplings (female thread BSP) or individually fitted with Storz, British Standard or NH-couplings. Other coupling systems are available upon request.

PRO JET model I

- 279217 With coupling Storz C
279218 With coupling BS 2 ½" male

PRO JET model II

- 279222 With coupling Storz B
279223 With coupling BS 2 ½" male

Recommended accessories for nozzles SELECT FLOW and PRO JET**Quick clamp on foam tube**

Expansion rate up to 14:1.

279236 For SELECT FLOW models RB 99 EN, RB 99 NFPA, RB 100D EN and RB 100 NFPA**279231** For SELECT FLOW RB 101 NFPA and PRO JET I**27923101** For SELECT FLOW RB 101 EN**279237** For PRO JET II**263450** **CAFS nozzle C-D25**

Coupling Storz C.

263454 **CAFS nozzle D25 1"**

Coupling BS 2 1/2" male

Elbow support 45°

Facilitates operating with nozzles by deflecting the recoil and increasing the mobility of the firefighter.

267850 **Elbow support Storz C**

Made of light alloy. Coupling Storz C.

267900 **Inlet: Storz B coupling**

Outlet: Swivel Storz B.

26790001 **Inlet: BS 336 2 1/2" male coupling**

Outlet: BS 336 2 1/2" female coupling.

**Quick clamp on foam tube**
(symbolic picture)**263450****267900**



1



2



3



4

NEPIRO ERGO HIGH PRESSURE FOG GUN

Optimum extinguishing efficiency

The combination of high pressure technology and O-stream nozzles enables particularly fine atomization of the water. The small drops completely evaporate and therefore deprive the fire of the maximum heat energy. In practice, this results in an optimal effect of the extinguishing agent.

The stream pattern can be adjusted to operational conditions very quickly by turning the O-stream nozzles. Only a quarter turn lies between solid jet and water curtain. Thus the entire adjustment range can be utilized without having to change the grip.

1. Full jet
2. Spray jet small 30°
3. Spray jet wide 60°
4. Water curtain 120°

Operational safety

Anodized cast aluminium for the base body, HartCoat coated aluminium for the nozzle and a valve piston made from stainless steel make the NEPIRO durable but yet still light. A plastic coating protects the nozzle and core additionally against mechanical damage.

The flush positioning of the nozzle and the special design of the valve allows impurities with a diameter of up to 5 mm (0.2 in) to be washed out during operation. This ensures the pistol is free of blockages.

The valve is optimised with the aid of flow calculations. An oil damping system ensures gentle closure and prevents pressure surges that stress the hose, reel and pump.

Ergonomic design

Due to the special styling of the pistol, the reactive force is aimed directly to the rear hand - giving the high pressure fog gun a completely natural feel in the hand. The front hand is free to guide the nozzle or to adjust the stream pattern. With the self-closing trigger, water can be released both in small bursts as well as very finely dosed.

NEPIRO Ergo

Flow rate:	High-pressure version 0-200 l/min (0-52.8 gpm) at 40 bar (580.2 psi) Normal pressure version 0-180 l/min (0-47.6 gpm) at 10 bar (145 psi)
Spray types:	O-stream nozzle with infinite adjustment of the stream pattern from full spray to protective shield
Throw range:	Up to 30 m (98.4 ft) with full jet
Valve:	Self-locking valve with oil damping
Housing:	Cast aluminium with plastic coating (PUR)
Dimensions:	Incl. brass coupling STORZ 38 L x W x H: approx. 540 x 80 x 350 mm (21.3 x 3.1 x 13.8 in)
Weight:	Incl. brass coupling STORZ 38 approx. 3.1 kg (6.8 lb)

High pressure fog gun NEPIRO Ergo**063783-001 with coupling STORZ 38****Recommended accessories for NEPIRO Ergo****521504-001 Bracket for NEPIRO ERGO****522890-001 Foam tube for NEPIRO ERGO****525863-001 Bracket for foam barrel****578341-001 Cleaning lance for NEPIRO Ergo**

The cleaning lance for the fog gun NEPIRO is the perfect attachment for improved cleaning. Due to the special cleaning nozzle, a flat jet is produced to easily remove particles of dirt with a water flow of max. 65 l/min at 40 bar (14.3 gpm at 580 psi).

576100-001 Extinguishing lance for NEPIRO Ergo

The extinguishing lance for the fog gun NEPIRO is the ideal tool to extinguish fire in hard to access places. In this way, light doors, sheet walls, bodywork parts on trucks or cars or also suspended roof parts in houses can be penetrated or broken through and then the fire extinguished.



063783-001



521504-001



522890-001



576100-001



578341-001



265493



265485

PORTABLE MONITORS

Portable monitor RB 6

- Robust and light construction
- Easy and quick to maneuver
- Can be stored in small spaces on vehicle
- Low center of gravity for stable operation
- Unmanned operation possible (observe safety guidelines)
- Available with various nozzles
- Vertical pivoting range of 30° to 60° unmanned, from 20° to 60° manned
- Horizontal swivel range +/- 20° from the center
- Different tips for a variety of flow rates possible
- Can be delivered with all common coupling systems

Flow rate Basis

Flow settings of 360-475-550-750-950 l/min (95-125-150-200-250 US gpm) at 7 bar (100 psi).

Throw range: up to 50 m (165 ft).

265497 With 1 x BS 336 2 1/2" male. Weight: 8 kg (17.6 lb)

265493 With 1 x Storz B. Weight: 8 kg (17.6 lb)

Flow rate Medium

Flow settings of 750-950-1,325 l/min (200-250-350 US gpm) at 7 bar (100 psi). Throw range: up to 50 m (165 ft).

265630 With 1 x Storz B. Weight: 8.3 kg (18 lb)

265508 With BSP 2 1/2" female. Weight: 8.3 kg (18 lb)

Flow rate Advanced

Flow settings of 950-1,400-1,900 l/min (250-350-500 US gpm) at 7 bar (100 psi). Throw range: up to 50 m (165 ft).

265640 With Storz B. Weight: 8.3 kg (18 lb)

265500 With 1 x BSP 2 1/2" female. Weight: 8 kg (17 lb)

POWER STREAM

Made of corrosion resistant light alloy. Will rotate with a 180° degrees sweep. The monitor has hand wheel elevation control from 90° to 30° above horizontal. Fitted with an infinitely adjustable monitor nozzle tip with flow settings of 1,200, 1,600, 2,000 or 2,400 l/min (300-400-500-600 US gpm). Large pattern ring allows for production of full stream, wide angle and narrow angle fog. The monitor comes complete with a foldaway ground base and thanks to its small dimensions, it can easily be stored in fire fighting trucks, pick-ups etc. The ground base includes hardened steel ground pikes that help maintain stability also on uneven ground surfaces. Dimensions (L x W x H): 64 x 66 x 41 cm (26 x 27 x 17 in) Weight complete: 17 kg (38 lb)

265485 Inlet 2 x Storz B

265487 Inlet 2 x 2 1/2" BS male

26548705 Inlet 2 x NH 2 1/2" female

Oscillating monitor

- Flow rates: 950-1,420-1,900 l/min (250-375-500 US gpm)
- Monitor has sweeping water streams for attack, cooling, protection and HAZMAT situations
- Turbine sweeps the outlet back and forth in a smooth and powerful motion while unmanned
- Oscillating at 10°, 15° or 20° either side of the centre
- Oscillating mechanism can be disengaged
- Elevation is adjustable between 30° and 60° unmanned - down to 20° when manned
- Built-in pressure gauge
- Large handle makes moving easy
- Carbide tip spikes for extended stability
- Powder coating gives corrosion resistant finish

Minimum flow to start oscillating: 650 l/min (170 US gpm)

Weight: approx. 16 kg (35 lb)

265515 BS 2 1/2" male

265513 Storz B

Recommended accessories for monitor RB 6 and POWER STREAM

265504 Tip for monitor 360-475-550-750-950
(95-125-150-200-250 US gpm)

265503 Tip for monitor 750-950-1,325
(200-250-350 US gpm)

265502 Tip for monitor 950-1,400-1,900
(250-350-500 US gpm)

265486 Foam nozzle

With integrated foam admixing system for 1 or 3 %. Comes complete with foam compound pick-up tube 2.5 long (8 ft) Maximum throughput 1,900 l/min (500 gpm) at 7 bar (100 psi), Weight: 6 kg (13 lb)



RB 6 oscillating monitor



265503



265504



265502



265486



**WILDFIRE
EQUIPMENT**

6



140854 / 140855



142750 / 142760 / 142740

WILDFIRE EQUIPMENT

Wildfire suit GAROS G10

Certified as to EN 15384:2020, EN ISO 11612:2015 and EN 1149-5:2018 (Antistatic)

140854 Wildfire turnout jacket GAROS G10

Comfortable designed jacket especially for wildland fire fighting. Made of flame- and heat resistant fabric which consists out of Aramide, Viscose FR and anistatic fibre. Sizes: 40-42 to 66-70 each in lengths A to E Weight: 0.9 kg (approx. 2.0 lb) (size 52 -54 C)

140855 Wildfire trousers

Comfortable designed trousers especially for wildland fire fighting Made of flame- and heat resistant fabric which consists out of Aramide, Viscose FR and anistatic fibre. Sizes: 40 to 70, each in lengths A to E Weight: 0.9 kg (approx. 2.0 lb) (size 52 C)

For more details see page 66.

SAFE GRIP 3

Certified according to EN 659:2008. These protective gloves for firefighters provide excellent heat and flame protection, excellent touch sensitivity and optimal fit.

142750 **SAFE GRIP 3** dark blue with cuff

142760 **SAFE GRIP 3** yellow with cuff

142740 **SAFE GRIP 3** dark blue with wristlet

157208 Firefighting helmet HEROS Matrix

Tested and certified as to prEN 16471:2015, 16473:2015 Type 3 and ISO16073. Helmet size easily adjustable from outside even when wearing gloves - the required setting can be changed quickly depending on the operation. Ergonomic, optimised 3-point chin and neck strap made of heat and flame resistant material. New inner lining, provides maximum safety and excellent wearing comfort. Comfortable padding inside for excellent wearing comfort during long lasting operations. The helmet allows for installation of integrated communication systems and accepts all common types of SCBA face masks.

Options: eye protector, helmet lamp, chin guard, communication set, helmet trims, edge protection for helmet shell
Weight: approx. 970 g (2.13 lb)

**156869 Neck protector****281610 Glasses for wildfire**

Benefits:

- Wide-vision safety goggles with exceptional wearer comfort.
- Combines hard and soft components which adapt to the wearer's face creating soft, effective seal around the eyes.
- Uvex supravision lens coating technology - anti-fog on the inside of the lens, scratch resistant on the outside, permanent - won't wash off
- Wide fully adjustable, high quality head strap offers pressure-free fit.
- Indirect ventilation ensures pleasant comfortable interior environment.
- Lens replacement possible



157208 / 156869



281610

281612 Firefighting mask wildfire, material NOMEX®

This mask protects the face from burns and helps to reduce smoke and ash particles inhalation. It incorporates a filter 9914 3M inserted into a filter pocket. This filter is made of activated carbon and is equipped with exhalation valve and high-visibility reflective strips throughout the garment. It can be adapted to your head or neck. According to UNE340, UNE 531, ISO13301, ISO 15001 standards.
Weight: 0.15 kg (0.3 lb)



281612

281613 Spare filter BLS for fire fighting mask**193002xx* BOROS B3 Cross with SympaTex® membrane certified as to EN 15090:2012**

Unique. Revolutionary. First class.

- Innovative Boa® Fit system
- Can be put on and taken off in a flash
- More safety thanks to numerous protection functions, e.g. ankle protection, 3M reflective materials, penetration resistance
- Improved wearing experience thanks to comfort features
- Highly waterproof and breathable SympaTex® climatic membrane
- Robust and easy to care for

Sizes: EU 36 to 52/UK 3 to 15

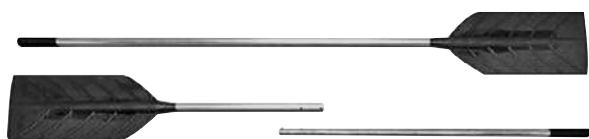
Weight: approx. 2.3 kg (5.1 lb) (per pair, size 43)

For further information see chapter 2 (firefighting boots).



193002

*Use the EU size in the article number instead of "xx", e.g. 19300243 for BOROS B3 Cross size 43.



281616



281618



281619



281660



601930

FIRELINE ACCESSORIES

281616 Fire swatter telescopic

Strong hardened aluminium tube. No rust, smooth finish. Blade made of synthetic rubber 6 mm (0.2 ft) thick. The entire beater is reinforced with a fabric for greater resistance to tearing. The critical areas have double reinforcements. Ergonomic rubber grip for comfortable handling. The handle is telescopic for easy transport by plane, helicopter, car, etc.

- Tube: 1,500 mm (4.9 ft)
- Frame width: 250 mm (0.8 ft), height: 500 mm (1.6 ft)
- Complete set: 1,995 mm (6.5 ft)

Weight: 1.8 kg (3.3 lb)

281618 Gorgui V2 multifunctional wildfire tool

The multifunctional Gorgui tool used against wildfire is designed especially for forest fire fighting.

- Four cutting edges in one tool: Pulaski hoe, Super pulaski, McLeod straight edge, Fire Rake
- Titanium alloy head for strength and durability is well balanced for all 4 edges
- Cutting edges are angled to maximise cutting action
- Cutting edges are replaceable
- Handle varies in diameter for better ergonomics
- Longer handle length (48" wood handle) reduces fatigue and back strain

Weight: 2.1 kg (4.6 lb)

281619 Compact drip torch, 1 l (0.3 US gal)

Designed to carry out fast maneuvers with technical fire during wildfire extinction. Ideal for brigades transported by helicopter, as they can carry the torch in the lateral pockets of their fire packs due to its reduced size. It is also perfect for fire controlling and analysing vehicles. This is an essential tool for carrying out indirect attack maneuvers: backfire, escape fire, self-protection fire, fire to create safety zones for parking the trucks. Its deposit is approved for fuel transportation. It provides different safety systems, such as a non-return valve inside the stopper and a flow control valve. The asymmetrical double-coiled stopper is the element that provides the compactness. This is definitely a great tool from the point of view of its operating capacity, transportation and potential of performances, different from such systems as lighters or bengal fires.

Weight: 1.5 kg (3.3 lb)

281660 Pulaski axe

The Pulaski Axe is a special wildfire tool, that may also be used for landscaping. Along with the standard single bit edge, there also is a special Mattock blade for dirt grubbing and trenching. This axe comes with polished red finish and 36" hickory handle.

Weight: 2.5 kg (5.5 lb)

601930 Folding spate

Versatile and lightweight hand tool with telescopic handle. At the rear of the handle is an integrated pull-out saw blade with 177 mm (0.6 ft) length. Extended working length: 640 mm (2.1 ft). Folded and packed length: 255 mm (0.8 ft). Including belt bag. Weight: 0.7 kg (1.5 lb)

Fireline accessories, wildland fire pump set

281635 Backpack type collapsible pump

The new backpack is a step forward to the professional and ergonomic equipment, which combines higher performance results and greater operational capacity of the crews, carrying hand tools in their backpack. Cordura backpack equipped with flexible inner tank with interchangeable canvas. Dual-piston manual pump. Ergonomic padded fixing harnesses and belts. The pocket and the belt for accessories feature the Alice-clip system. Upper handles to make load carrying easier. Fixing straps for the chest and also fixing straps for the pump and hand tools in the back. This backpack's capacity is 20 l (5.3 US gal). Inner tank made of PVC. Thermo-welded canvas. Plug protected against deformation and reinforced filter. Output metal valve with 360° system. In red and black color. Output approx. 8 l/min (2.1 US gpm).
Weight: 2.6 kg (5.8 lb)



281635

WILDLAND FIRE PUMP SET**281655 Set pump**

Part 1 of the set consists of a comfortable load carrier incl.: Integrated, self-priming small 4-stroke motor pump

- Output: 1.6 kW
 - Max. pressure: 4 bar (58 psi)
 - Max. funding amount: 40 m (131.2 ft)
 - Max. grain size: 6 mm (0.2 in)
 - Max. suction height: 8 m (26.2 ft) self-priming
 - Max. flow rate: 240 l/min (63.4 US gal/min)
- 3 m (9.8 ft) suction hose incl. strainer
- Specially designed adapter plate for safe transport
- Stable lashing device

Dimensions: 78 x 35 x 27 cm (30.7 x 13.8 x 10.6 in)
Weight: 15.8 kg (34.8 lb)



281655

281558 Set wildland fire hoses and fittings

Part 2 of the set consists of a robust, watertight 30 l (7.9 US gal) transport backpack with wildland fire hoses and fittings.

- 4 x delivery hose Titan Flame 15 m (49.2 ft) with perforation (= self-protection in the event of embers), Storz D
- Ball valve distributor D - 2 x D
- 2 x D nozzles

Dimensions: 85 x 35 x 22 cm (33.5 x 13.8 x 8.7 in)
Weight: 12.9 kg (28.4 lb)



281558

281559 Set wetting agent

The use of wetting agents significantly increases the extinguishing effect, especially in wildfire (ground fires, earth fires). Part 3 of the set consists of a robust tool bag incl.:

- Cartridge holder for wetting agent
- 20 cartridges

Dimensions: 35 x 25 x 10 cm (13.8 x 9.8 x 3.9 in)
Weight: 1.7 kg (3.7 lb)

703486 Cartridge holder FIRE-EX 1000 D-D**703483 Wetting agent 20 cartridges**

703486/ 703483



204061



279503



258100



292423

HOSES AND FITTINGS

Titan Flame wildfire pressure hose with hose guard

Areas of application: forest and wildland firefighting

Advantages:

- Self-moistening thanks to perforations
- No fountain formation effect, even at > 60 bar (870 psi)
- Very small bending radius, therefore fewer kinks = longer service life
- Extremely high abrasion resistance thanks to the special 4Z system
- Over 100 bar (1,450 psi) burst pressure for large output reserves
- Distinctive design for high visibility through contrast weaving
- HOSE-GUARD protective sleeve as standard, to protect against defects in the coupling area
- Corrosion-resistant hose binding made of stainless steel wire
- Minimized twisting and stretching
- Suitable for all types of hose washing systems
- Water loss 2 l/min (0.5 US gpm) at 6 bar (87 psi) over 100 m (328.1 ft) length
- \varnothing 25 mm (1.0"), Storz D, color: neon orange

204061 Length: 15 m (49.2 ft)

204063 Length: 20 m (65.6 ft)

204065 Length: 25 m (82.0 ft)

204067 Length: 30 m (98.4 ft)

279503 **RB 99 EN nozzle with Storz D coupling**
17-30-80-130 l/min (4.5-8-21-35 US gpm),
EN 15182-2:2007

263263 **HS7 nozzle with Storz D coupling**
80 l/min (21.1 US gal)

258100 **Ball valve divider Storz C - D/C/D**

258400 **Ball valve divider Storz C - D/D**

258601 **Ball valve divider D - D/D**

292423 **Wildfire hose transport basket, fully equipped**

With this customized basket you can transport the most urgently and frequently needed equipment to the scene of the emergency. These are 4D hoses 1" of 15 m (49.2 ft) for the initial extinguishing attack. Also three nozzles and the C-DDD special divider. Like the wildfire hose basket.

Dimensions (L x W x H): 87 x 52 x 11.5 cm (2.9 x 1.7 x 0.4 ft) (dimensions for DIN hose basket C)

Equipment: 4D hoses each 15 m (49.2 ft), 3D nozzles (AWG) HS7 without handle, 1x D C-DDD

Material: aluminum, special feature: nozzles and distributor can be removed without opening the basket.



**EXTINGUISHING
SYSTEMS
SUBMERSIBLE PUMPS
PORTABLE FIRE PUMPS**

7



The RFC Battery fire extinguishing system consists of an extinguishing unit and an operating unit.

RFC BATTERY EXTINGUISHING SYSTEM

Extinguishing system for HV batteries in electric vehicles

The Rosenbauer extinguishing system for high-voltage batteries in electric vehicles is a system for the safe, efficient, and rapid extinguishing of lithium-ion batteries. It enables direct cooling of the battery modules or the cells within the modules and thus quickly stops the chain reaction in the continuous cells.

The system consists of two main components - the extinguishing unit and the control unit, which are connected to each other with hoses. The extinguishing unit is positioned on the battery and, if necessary, supported on the superstructure or other points. The preferred position of the extinguishing unit is on the vehicle's underside. The operating unit is used to trigger the penetration of the extinguishing mandrel into the battery housing from a safe distance from the burning object. Immediately after penetration, the battery housing is flooded with extinguishing water and the efficient cooling process starts.

Advantages of the battery extinguishing system

Safe

Emergency crews only spend a short period of time in direct proximity to the electric vehicle to be extinguished. The short time spent near the vehicle reduces the risk of contamination by smoke and gas in the event of battery outgassing.

RFC Battery extinguishing system

Efficient

The extinguishing system applies the extinguishing water exactly where it is needed: to cool the cells and modules in the battery housing. Extinguishing thus takes place in a very resource-efficient way and reduces the spread of smoke gases to a minimum.

Rapid penetration

Due to the special penetration method of the extinguishing lance, all currently known and tested battery housings can be safely penetrated.

Self-sufficient

The energy required for penetration is provided by compressed air bottles.

Tested under real conditions

During research and development, numerous fire tests were carried out with a variety of battery systems and complete vehicles. The system was tested on all common cell types (round, pouch, or prismatic cell) in platforms of European and American cars and HGVs. The tested batteries had capacities up to 120 kWh.

Tested in practice

Plant, professional, and voluntary fire departments in Europe have been testing the extinguishing system for months and provide important feedback from practical applications.

Normal pressure extinguishing system

The extinguishing system only requires water at a pressure of 5-10 bar (72.5-145 psi) as the extinguishing medium. Therefore, any existing normal pressure extinguishing technique can be utilized. The extinguishing water is supplied via a Storz C connection.

Technical data

Flow:	<ul style="list-style-type: none"> ▪ 30 l/min (8 US gpm) at 7 bar (100 psi) ▪ Flow range from 25 l/min (6.6 US gpm) at 4 bar (58 psi) to 50 l/min (13.2 US gpm) at 15 bar (217 psi)
Connection hose:	Storz C
Length of hose package:	8 m (26 ft) as standard
Compressed air supply:	2 x 1 l 300 bar (0.26 US gal/4,350 psi)
Extinguishing unit weight:	approx. 20 kg (44 lb)
Control unit weight:	approx. 20 kg (44 lb)
Hose package weight (8 m (26 ft)):	approx. 20 kg (44 lb)



The extinguishing unit is positioned on the battery.



If necessary, the vehicle can be raised with a jack or hydraulic spreader.



Penetration into the battery is enabled by means of the control unit.



RFC CAFS CUBE S WATER-DRIVEN COMPRESSED AIR FOAM SYSTEM

Description

The RFC CAFS Cube S is a portable compressed air foam system with very compact dimensions. In addition to wet and dry compressed air foam (CAFS 200/600), it can also be used to produce wetting agent or a water-foam mixture. The system is operated via a water-driven motor, which means that any fire truck with a water pump can be equipped with a compressed air foam system without any conversion measures.

Benefits

Intelligent design

- Individual fixation with standard mounting systems or flexible replacement with a power generator depending on the application scenario by mounting on an 8 DIN transport frame
- Convenient removal from the vehicle and positioning at the operation site by using four folding carrying handles

Energy-independent operation

- Easy to handle due to the manual operation and the water-driven motor via a forward and return line
- Extremely easy to maintain and reliable due to the absence of electrical systems and fuel-powered engines
- No noise or exhaust emissions during operation

First-class extinguishing performance

- Excellent extinguishing effect through maximum cooling, effective displacement of oxygen, and thorough penetration of the burning object
- High degree of protection against burn-back due to interruption of the oxygen supply and continuous cooling
- Preventive protection against flying sparks and heat for property endangered by fire

Excellent throw range

- Large safety distance from the source of fire
- Makes the fighting of fires in inaccessible places and at heights easier

Visible extinguishing success

- White compressed air foam with strong adherence properties is visible to the jet pipe operator
- The evaporation of compressed air foam acts as an indicator of surfaces that are still too hot RFC CAFS Cube S



Technical data

Standard:	according to NFPA 1906, EN 16327 and ISO 7076-6
Frame:	8 DIN frame according to DIN 14685-1 (portable power generator)
Dimensions:	W x D x H = approx. 806 x 434 x 578 mm (32 x 17 x 23 in)
Weight:	approx. 150 kg (330 lb)
Engine:	water-driven motor
Water circulation :	approx. 1.600 l/min (423 gpm) at 6.5 bar (95 psi)
Foam pump:	membrane pump
Foam concentrate supply:	external foam concentrate can
Foam concentrate connection:	Storz D
Suction height:	1.5 m (59 in)
Proportioning rate:	wetting agent, 1 % or 3 %
Foam concentrate:	foam concentrate with a viscosity of up to 80 cSt
Compressor:	belt-driven screw compressor
Air quantity :	approx. 600 l/min (159 gpm) at 8 bar (116 psi)
Compressor cooling:	oil / water - plate heat exchanger
Connections:	<ul style="list-style-type: none"> ▪ 2 x 2½" supply connection (forward and return line) ▪ 2" pressure outlet
Flow rate (water mode):	approx. 200 l/min (53 gpm) at 6.5 bar (95 psi)
Flow rate (foam mode):	approx. 200 l/min (53 gpm) at 6.5 bar (95 psi)
Flow rate (CAFS mode) ¹ :	approx. 50 - 200 lpm (13 - 53 gpm) at 6.5 bar (95 psi)
CAFS foam quantity ² :	approx. 800 lpm (211 gpm)
Expansion ratio ³ :	approx. 4 (wet foam) - 11 (dry foam)
Design:	<ul style="list-style-type: none"> ▪ vehicle mounting ▪ transport frame

¹ depending on the set expansion ratio

² with a set expansion ratio of 4 (wet foam)

³ expansion ratio depends on foam concentrate used





RFC CAFS Cube mobile compressed air foam system



Intuitive operation through the RBC LCS Compact

RFC CAFS CUBE

The RFC CAFS Cube is an independent compressed air foam system designed as a motor-pump unit. In addition to wet and dry compressed air foam (CAFS 400/1200), pure water can also be applied, and wetting agents or water-foam compound mixtures can be generated. When permanently installed or mounted on a roll container, fire engines without a water pump can also be easily equipped with a CAFS system.

Highly effective CAFS technology

The modern compressed air foam technology enables fast and safe fire fighting of solid and liquid fires, as well as the preventative protection of objects at risk of fire. Even with minimal extinguishing agent use, a maximum extinguishing effect and a high level of safety against back-burning is achieved.

Complete pump unit

The RFC CAFS Cube is powered by a combustion engine that draws fuel from an external can. The water for the pump can be supplied from any source thanks to the integrated priming pump, both in feed and suction operation. The foam compound pump is supplied via an external canister and the proportioning rate can be adjusted gradually using an adjusting handle. A water-only outlet and a universal outlet for water and a mixture of water, foam compound, and compressed air foam are installed for the discharge of extinguishing agent.

Intuitive operation

The RFC CAFS Cube can be quickly put into operation at the flip of a switch, and the intuitive operation via the RBC LCS Compact makes it easy to change the extinguishing medium. The water pump has an automatic priming device that turns on and off automatically and a pump pressure regulator that keeps the outlet pressure constant. In addition, the operator is guided with supporting messages on the RBC 3.5" LCS display during required work steps.

Comprehensive certification

The RFC CAFS Cube meets both European standard EN 16327 and international standard ISO 7076-6 for compressed air foam systems. Safe application with a highquality and functional extinguishing system is thus guaranteed.



Two pressure outlets for the delivery of a water-foam compound mixture or wet and dry compressed air foam

Technical data	
Dimensions (W x D x H):	approx. 1,103 x 756 x 725 mm (44 x 30 x 29 in)
Weight:	approx. 280 kg (618 lb)
Approval:	<ul style="list-style-type: none"> ▪ EN 16327 ▪ ISO 7076-6
Classification:	<ul style="list-style-type: none"> ▪ Pressure proportioning system EN 16327 - DZA 400 / 0.3 - 3 ▪ Pressure proportioning system ISO 7076-6 - DZA 400 / 0.3 - 3 ▪ Compressed air foam system EN 16327 - DLS 400 / 1200 ▪ Compressed air foam system ISO 7076-6 - DLS 400 / 120
Engine:	Briggs&Stratton V2 cylinder 4-stroke engine, 993 cm ³ , 29 kW (39 hp) output
Engine cooling:	Oil/water heat exchanger plate
Fuel supply:	External fuel canister
Water pump:	Single-stage centrifugal pump
Priming pump:	Ejector pump
Foam pump:	Membrane pump
Foam compound supply:	external foam compound canister
Foam compound connection:	Storz D
Suction lift:	1.5 m (59 in)
Proportioning ratios:	Wetting agent, 1% and 3%
Foam compound:	Foam compound with viscosity up to 80 cSt
Compressor:	belt-driven screw compressor
Air volume:	approx. 1,200 l/min (317 gpm) at 8 bar (116 psi)
Compressor cooling:	Oil/water heat exchanger plate
Connections:	<ul style="list-style-type: none"> ▪ 4½" supply input ▪ 2 x 2½" discharge outlet
Water mode flow rate:	approx. 750 l/min (199 gpm) at 10 bar (145 psi)
Foam mode flow rate:	approx. 400 l/min (106 gpm) at 6.5 bar (95 psi)
CAFS mode ¹ flow rate:	approx. 100-400 l/min (27-106 gpm) at 6.5 bar (95 psi)
CAFS foam volume ² :	approx. 1,600 l/min (423 gpm)
Expansion ratio ³ :	approx. 4 (wet foam) - 11 (dry foam)
Design:	<ul style="list-style-type: none"> ▪ Vehicle installation ▪ Roll container

¹ Depending on the set foam expansion value

² With the foam expansion number set to 4 (wet foam)

³ The expansion number depends on the foam compound used



UHPS ULTRA-HIGH PRESSURE SYSTEM

A compact unit, ideal for effective rapid assaults with the smallest amounts of extinguishing agent.

Optimal combination

Through extensive testing, Rosenbauer has determined the optimal combination of water pressure and water volume for compact high-pressure systems. In order to effectively eliminate the temperature from fires, certain minimum quantities of extinguishing water are required: 38 l/min (10 US gpm) has proven to be very effective in tests. High pressure enables very fine atomization of the extinguishing water, with a value of 100 bar (1,450 psi) being a sensible upper limit. Higher pressures do not improve the extinguishing effect.

Versatile nozzle

Application takes place via a precisely matched nozzle. The spray pattern can be continuously adjusted between full jet and spray jet at any time during operation. The extinguishing agent can be released both continuously and intermittently.

UHPS ultra-high pressure system

Finest atomization

Due to the precisely matched nozzle and flow rate, the firefighting water in the spray jet is very finely atomized and therefore multiplies the cooling area. The heat is dissipated by the complete conversion of the extinguishing water into steam, thus avoiding water damage.

Light hose

The thin, light hose can be easily pulled along stairwells and around and over corners, angles, and edges. This enables the nozzle operator to quickly advance to the seat of the fire. Fires that are further away can also be reached quickly and easily thanks to the hose length of 60 m (197 ft).

Compact dimensions

The compact unit also fits on pickups and panel vans, so narrow streets or rough terrain can be navigated quickly and easily.

Excellent foam quality

In combination with the foam attachment, the integrated foam proportioning system enables the application of foam with high foaming values.

Motor:	Briggs&Stratton/Vanguard 16 HP, Displacement 480 cm ³ , max. power 11.8 kW (16 hp) at 3,600 1/min (951 US gal/min). Fuel tank: 8.5 l (2.25 US gal) with gasoline tap, fuel at least RON 86, leaded or unleaded, electric starter, battery 12 V/17 Ah, manual pull starter for emergency operation, low-noise muffler with protection against accidental contact
Pump:	3-stage high-pressure brass piston pump with ceramic pistons, oil bath lubrication
Pump capacity:	38 l/min at 100 bar (10 gpm at 1450 psi), pressure relief valve, overheating protection, glycerine vaporized pressure gage 0-250 bar (0-3,625.9 psi), upstream filter element
Rapid attack:	60 m (197 ft), HD hose NW12, reel with hose window and lock, ergonomically shaped nozzle with pistol grip, stepless adjustment between full and spray jet, removable foam attachment
Foam proportioning:	0-6% continuously adjustable proportioning rate, NW 8 foam compound suction hose, 20 l (5.3 US gal) Foam compound canister made of plastic (PE)

UHPS SKID

The SKID variant of the UHPS high-pressure extinguishing system has been specially developed for quick initial assaults. The compact unit is ideal for retrofitting to non-water-carrying vehicles, and can be easily installed in pickups, panel vans, or other vehicles. Tank sizes from 200 to 500 l (52.8-132.1 US gal) available.



UHPS SKID



RFC POLY EXTINGUISHING SYSTEMS

The RFC POLY extinguishing systems are powerful, compact, and energy-independent. They feature CAFS technology, are ready for immediate deployment, and are highly effective in fighting small and incipient fires.

Highly effective CAFS technology

RFC POLY extinguishing systems feature the latest CAFS technology. They enable fast and safe firefighting of spatially confined solid and liquid fires, as well as the preventative protection of objects at risk of fire. Even with minimal extinguishing agent use, a maximum extinguishing effect and a high level of safety against back-burning is achieved.

Operation-optimized design

The RFC POLY extinguishing systems are designed for efficient extinguishing in the first, crucial minutes of a fire. The extinguishing devices are compact in design and work reliably and independently of external energy sources. They are ergonomic to use, easy to refill, and ready for operation in seconds.

Consistent model range

RFC POLY extinguishing systems are available as mobile and stationary devices. They are available as portable and mobile fire extinguishers or as versatile SKID modules that can also be installed in vehicles.

RFC POLY PORTEX

The RFC POLY Portex SL10 is just as compact as a conventional fire extinguisher or hand-pump extinguisher, but exceeds their extinguishing performance many times over. The portable CAFS fire extinguisher is fully operable with protective gloves and works reliably in any situation. With an extinguishing agent quantity of 10 l (2.6 US gal) of water, the RFC POLY Portex SL10 facilitates approximately one minute of uninterrupted extinguishing.

CC719-PP10 RFC POLY Portex

Accessories for the RFC POLY Portex

CC71A-TR01 Trolley

The RFC POLY Portex can be pulled with one hand with the trolley. This makes the trolley perfect for operations where longer distances have to be covered (e.g., a fire alert in a hospital). The trolley can be mounted on and removed from the RFC POLY Portex without tools.

CC71A-RT01 Back carrier

The RFC POLY Portex can be carried on the back with the back carrier. This makes the back carrier perfect for operations where space is limited (e.g. fire safety guard in a football stadium). The back carrier can be mounted on and removed from the RFC POLY Portex without tools.

CC71A-LA01 Extinguishing attachment for Bengal fires

Bengal fires can be extinguished in a very short time with the extinguishing attachment. This makes the extinguishing attachment perfectly suited for operations when Bengal fires are anticipated (e.g. sports events, demonstrations, etc.). The extinguishing attachment can be mounted on the RFC POLY Portex nozzle without tools.



CC719-PP10



CC71A-TR01



CC71A-RT01



CC71A-LA01



RFC POLY TROLLEY

The RFC POLY Trolley SL50 can be used both in firefighting vehicles and for stationary fire protection. The mobile CAFS fire extinguisher has two large and robust wheels and can be easily transported even over longer distances. An ergonomic handle provides excellent grip. With an extinguishing agent quantity of 55 l (14.5 US gal) of water, the RFC POLY Trolley SL50 enables approximately one and a half minutes of uninterrupted extinguishing.

CC711-PT50 RFC POLY Trolley SL50

Accessories for the RFC POLY Trolley

CC71B-SW01 Dirt and weather protection hood

With the dirt and weather protection hood, the RFC POLY Trolley can be protected from dirt and the elements. This makes the dirt and weather protection cover perfect for positioning of the RFC POLY Trolley in dirty areas (e.g., production sites) or outdoors. The dirt and weather protection cover can simply be pulled down over the RFC POLY Trolley by hand.

RFC POLY SKID

RFC POLY Skid modules SL50-300 represent a complete series of CAFS extinguishing systems, which are available in numerous versions and can be operated in a variety of different ways. The modules can be mounted on mobile equipment carriers, such as aluminum Euro pallets or mobile equipment carriers (MECs), mounted on pull-outs, or permanently installed in vehicles. This makes them ideal for both stationary fire protection and for integration into large and small firefighting vehicles. The RFC POLY Skid modules are available in five different sizes. The extinguishing agent tanks hold between 50 l and 300 l of water (14.5-79.3 US gal), enabling operating times of up to 8 minutes.

CC71C-PS50 RFC POLY Skid Module SL50

CC71C-PS75 RFC POLY Skid Module SL75

CC71C-PS10 RFC POLY Skid Module SL100

CC71C-PS20 RFC POLY Skid Module SL200

CC71C-PS30 RFC POLY Skid Module SL300

Accessories for the RFC POLY Portex, RFC POLY Trolley and RFC POLY Skid

CC71X-BP01 Drill pump

With the drill pump, the RFC POLY Portex, the RFC POLY Trolley and the RFC POLY Skid can be filled with a ready-made foam compound solution for use at temperatures in the minus range.

CC71X-LL01 Extinguishing lance for ember control

Hot spots can be extinguished in no time with the extinguishing lance. This makes the extinguishing lance perfect for post-extinguishing work on objects that are at an angle or out of sight (e.g., straw bales, roof trusses, etc.). The extinguishing lance can be mounted and dismantled from the RFC POLY Trolley or RFC POLY Skid nozzle without tools.



CC711-PT50



CC71B-SW01



RFC POLY Skid



CC71X-BP01



CC71X-LL01



NAUTILUS SUBMERSIBLE PUMP

Rosenbauer has been developing and producing a wide variety of pumps for use by fire services for more than 100 years. The NAUTILUS submersible pumps with tried-and-tested Rosenbauer pump technology round off the extensive production range.

The NAUTILUS submersible pumps are tested and certified according to DIN 14425 "Portable submersible pumps with electric motor" and the Austrian Federal Fire Brigade Association's (ÖBFV) "Submersible pumps" standard sheet.

Incredibly light

With a total weight of only 30 kg (66.1 lb) (incl. cable), the NAUTILUS 8/1 is one of the lightest pumps in its class. The NAUTILUS 4/1 and 4/1 ECO are also lightweight. On both types of pumps, the two handles are bent outwards, so that the pump can be carried very easily by one or two people. The handles also prevent the NAUTILUS from hitting the carrier's legs when being transported.

The pumps are designed very slim. On the one hand, this ensures very convenient and space-saving loading onto firefighting vehicles. On the other hand, the NAUTILUS is also perfect for deployment in narrow shafts or wells.

A practical cable support ensures that the cable can be wound up directly against the pump to save space.





Sensational technology - flat suction down to just a few mm

The integrated flat suction device of the NAUTILUS submersible pumps enables water to be pumped out down to a water level of a few millimeters at full power. Doing so requires neither the removal of the suction screen nor an additional device mounted on the pumps.

- NAUTILUS 8/1: Flat suction to approx. 8 mm (0.3 in) possible
- NAUTILUS 4/1 and 4/1 ECO: Flat suction to approx. 4 mm (0.2 in) possible

Easiest operation

The NAUTILUS submersible pumps are very easy to operate. They can be operated standing, lying or completely submerged. The NAUTILUS can also pump dirty water (sand and mud sedimentation).

- NAUTILUS 8/1: Particle screen 10 mm (0.4 in)
- NAUTILUS 4/1 and 4/1 ECO: Particle screen 8 mm (0.3 in)

Quick fastening of the working rope

The working rope carabiner can be hooked into an eyelet specially provided for this purpose. As a result, the pump can be safely lowered and pulled back up using the working rope.

Cable

The integrated cable support ensures that the 20 m (65.6 ft) long cable can be attached directly to the pump to save space.

- NAUTILUS 8/1: H07RN-F / 20 m (65.6 ft), 4G1.5
- NAUTILUS 4/1 and 4/1 ECO: H07RN-F / 20 m (65.6 ft), 3G1.5

Functional check of mechanical seal

The user can check the functioning of the mechanical seal for themselves at any time. A separate inspection opening is included in the pump cover for this purpose. With the NAUTILUS, Rosenbauer has thus also met the desire for simple servicing. NAUTILUS submersible pumps are oil-free and maintenance-free.

NAUTILUS submersible pump

NAUTILUS 8/1 submersible pump

Certified according to DIN 14425 type 8/1 and the "Submersible pumps" norm sheet of the Austrian Federal Fire Brigade Association (ÖBFV).

Includes rotation direction display on the CEE motor protection on/off switch. The rotation direction is easily changed, if necessary, using the phase changer on the plug. The performance of the NAUTILUS 8/1 is 17% higher than the minimum requirement of 1 bar (14.5 psi), making it one of the most powerful pumps in its class.

Performance data:

Flow l/min (US gpm):	1,330 (351.4)	1,170 (309.1)	935 (247.0)	600 (158.5)	120 (31.7)	0
Pressure bar (psi):	0	0.5 (7.3)	1 (14.5)	1.5 (21.8)	2 (29)	2.1 (30.5)

- Supply voltage: 400 V/3-phase
- Power consumption: 4.2 kVA, cos φ 0.8
- Power output: 2.8 kW
- Nominal current: 6 A
- Connection cable: H07RN-F 4G1, 5 with a length of 20 m (65.6 ft) and operation with a generator from 5 kVA possible, with CEE phase reversal plug 16 A and motor protection/on/off switch with rotation direction display
- Discharge connection: G 2 1/2" (0.4") (Storz B DIN 14308)
- Particle screen: ø 10 mm
- Pumped medium temperature: 35 °C (95 °F), temporarily up to max. 60 °C (140 °F)
- Dimensions (W x L x H): 262 x 258 x 483 mm (10.3 x 10.2 x 19.0 in)
- Weight (incl. cable): 30 kg (66.1 lb)

52470A-001 NAUTILUS 8/1 with Storz B coupling

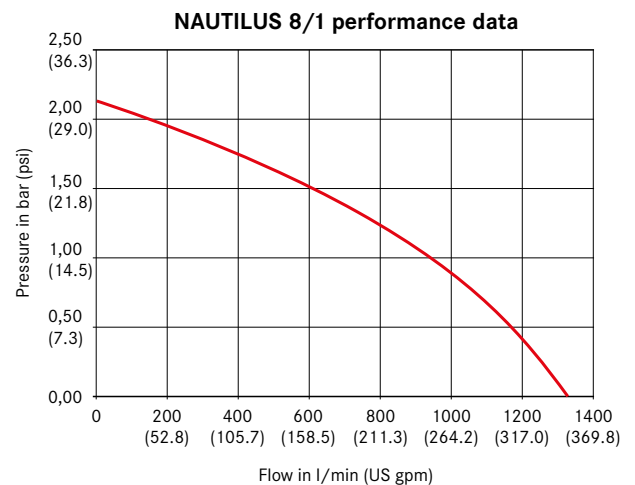
Accessories for NAUTILUS 8/1

933007 PRCD-S personal protection equipment
If a 400 V fire brigade submersible pump (NAUTILUS 8/1) is not operated using a standardized power generator (according to DIN 14685) but instead connected to a household installation, the mobile safety switch should be connected like an extension cable between the consumer and the socket in order to provide effective and reliable protect against electric shocks. Please observe country-specific regulations! PRCD-S 5-pin, 400 V, IP 44, in robust CEE rubber distributor with carrying handle.

- 933085 Level switch 400 V**
- 268020 B-pipe elbow 90° with Storz B coupling**
- 268035 Storz B outlet pipe**
- 275770 Hose anti-kink elbow**



52470A-001



933007

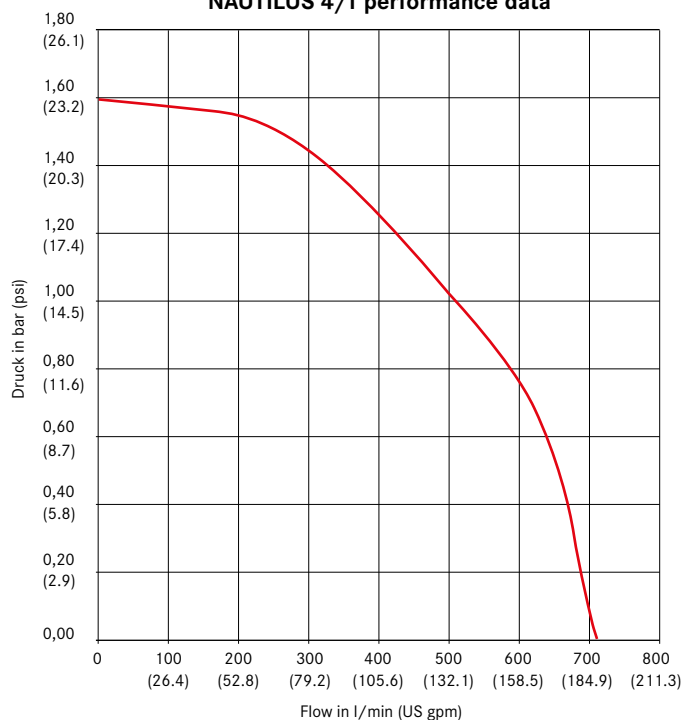


268020



977234-101

NAUTILUS 4/1 performance data

**NAUTILUS 4/1 submersible pump**

Certified according to DIN 14425 Type 4/1.

Performance data:

Flow in l/min (US gpm):	710 (187.6)	640 (169)	510 (134.7)	260 (68.7)	0
Pressure in bar (psi):	0	0.5 (7.3)	1 (14.5)	1.5 (21.8)	1.6 (23.2)

Supply voltage:	230 V/1-phase
Power consumption:	2.07 kVA, cos φ 0.99
Power output:	1.49 kW
Nominal current:	9 A
Double capacitor control:	High starting torque with reduced power consumption.
Connection cable:	H07RN-F 3G1.5 with an length of 20 m (65.6 ft) and with water pressure-tight plug (IP68)
Discharge connection:	G 2 1/2"(Storz B DIN 14308)
Particle screen:	\varnothing 8 mm (0.3 in)
Temperature of pumped medium:	35 °C (95 °F), temporarily up to max. 60 °C (140 °F)
Dimensions (W x L x H):	250 x 253 x 455 mm (9.8 x 9.9 x 17.9 in)
Weight (incl. cable):	23 kg (50.7 lb)

977234-101 NAUTILUS 4/1 with Storz B coupling**932000 NAUTILUS 4/1 pump set**

Kit consists of:

- NAUTILUS 4/1 with Storz B coupling
- ABC coupling spanner DIN 14882
- Firefighting pressure hose B 20, length: 20 m (65.6 ft)
- Outlet pipe B
- B-pipe elbow 90°
- Hose kink protector
- Rope hose holder
- Working rope with carabiner and line bag, Length: 20 m (65.6 ft)
- PRCD-S personal safety switch
- Wire netting basket with two handles, can be used as a transport and suction protection basket, galvanized, stackable.

Dimensions (L x W x H): approx. 615 x 455 x 410 mm (24.2 x 17.9 x 16.1 in), Mesh size: 20-25 mm (0.8-1 in)



932000

NAUTILUS submersible pump

NAUTILUS 4/1 ECO submersible pump

With the NAUTILUS 4/1 ECO, a new submersible pump joins the family of NAUTILUS pumps. The "ECO" model of the tried and tested NAUTILUS 4/1 was specially developed for operation with smaller 3 kVA generators. Experience shows that many fire departments use generators with outputs of less than 5 kVA. The NAUTILUS 4/1 ECO is ideal for them and is now available. The new pump is equipped with an electric motor with a power consumption of 1.84 kVA. The optimized impeller is also new, due to which the start-up current of the submersible pump is significantly lower.

Performance data:

Flow in l/min (US gpm):	670 (176.9)	600 (158.5)	420 (110.9)	150 (39.6)	0
Pressure in bar (psi):	0	0.5 (7.3)	1 (14.5)	1.5 (21.8)	1.7 (24.6)

Supply voltage: 230 V/1-phase
 Power consumption: 1.84 kVA, cos φ 0.98
 Power output: 1.2 kW
 Nominal current: 8 A
 Double capacitor control: high starting torque with reduced power consumption. Operation is possible using a generator with min. 3 kVA.
 Connection cable: H07RN-F 3G1.5 with an length of 20 m (65.6 ft) and with water pressure-tight plug (IP68)
 Discharge connection: G 2 ½" (0.3") (Storz B DIN 14308)
 Particle screen: ø 8 mm (0.3")
 Pumped medium temperature: 35 °C (95 °F), temporarily up to max. 60 °C (140 °F)
 Dimensions (W x L x H): 250 x 253 x 435 mm (9.8 x 9.9 x 17.1 in)
 Weight (incl. cable): 22 kg (48.5 lb)

16146A-101 NAUTILUS 4/1 ECO with Storz B coupling

Accessories for NAUTILUS 4/1 and NAUTILUS 4/1 ECO

PRCD personal protection equipment

If 230-V fire service submersible pumps (NAUTILUS 4/1 and 4/1 ECO) are not operated using a standardized power generator (according to DIN 14685), but are instead connected to a household installation, the mobile safety switch should be connected like an extension cord between the consumer and the socket in order to effectively and reliably protect against electric shocks. Please observe country-specific regulations! IP54 mobile protective switching device in a plastic housing, provided with 1.5 m (4.9 ft) 3G 1.5 mm² connecting cables and Schuko plug or Schuko coupling.

- 933002 PRCD-K, 230 V**
For operation of 4/1 submersible pumps with generators. Incl. IP68 Schuko coupling and IP68 Schuko plug.
- 933001 PRCD-S, 230 V**
For operation of 4/1 submersible pumps with household installations. Incl. IP68 Schuko coupling and IP44 Schuko plug.
- 933060 Level switch 230 V**
- 268020 B-pipe elbow 90°**
- 268035 Storz B outlet pipe**
- 275770 Hose anti-kink elbow**

Holder for NAUTILUS submersible pump

Material: aluminum. Orange strap.

- 970334-101 For NAUTILUS 4/1 submersible pump**
- 970334-102 For NAUTILUS 8/1 submersible pump**



16146A-101



NAUTILUS 4/1 ECO in operation with a 3 kVA generator



933002



933001



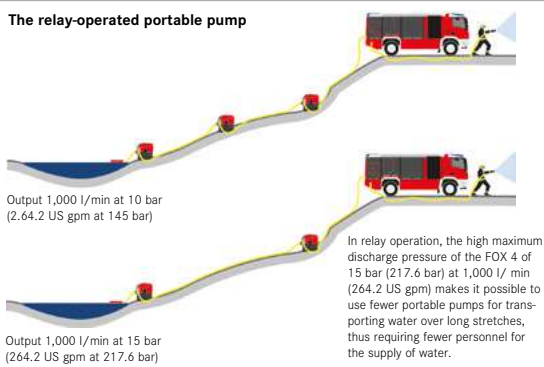
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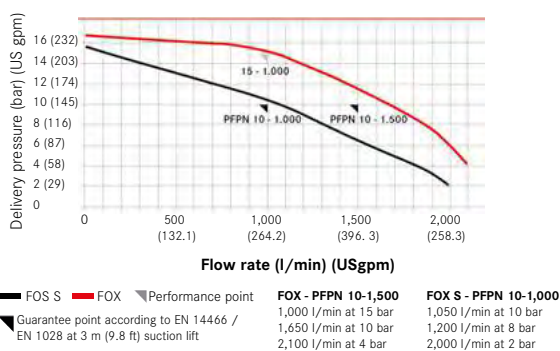
970334-101



The relay-operated portable pump



Pump performance of the FOX and FOX S



PORTABLE FIRE PUMPS FOX AND FOX S

The FOX portable pump product family impresses in terms of power, weight, reliability and ease of operation in a unique way. The compact size and unrivalled ergonomic handles of the Rosenbauer FOX allow ease of transport in the final meters leading to the operation site. With maximum pumping capacity and reliable technology, it impresses in every operation. The FOX and FOX S are driven by powerful BRP Rotax 4-stroke engines.

The FOX product family includes 2 variants:

- FOX - PFPN 10-1500 and PFPN 10-1000 with 166 kg (366 lb)
- FOX S - PFPN 10-1000 with 150 kg (330.7 lb)

Pump with maximum efficiency

FOX portable pumps feature a newly developed, single-stage pumping unit, which was developed specifically for use in portable pumps. The stationary impeller with spatially curved blades in a spiral housing made of light alloy converts the mechanical engine power in the single-stage centrifugal pump into hydraulic power with a very high level of efficiency. A pump shaft made of stainless steel, the lubricant- and maintenance-free mechanical shaft seal, the tension ring design of the pump and not least the ease of access to the engine and pump make these FOX models extremely easy to maintain.

Engine

Powerful 2- and 3-cylinder BRP Rotax series engines with electronic motor control form the power sources for the two portable pumps. The water-cooled engines are optimised for use in hot and cold countries and under the most adverse environmental conditions, thus offering the ideal basis for use in portable pumps.

Safe and fast external drafting

The Rosenbauer FOX also impresses with its robust construction. Once the pump is full of water, the suction pump is switched off automatically. Bilge operation, used when draining flooded basements for example, is possible without any modifications or operator steps.

Intuitive LCS 2.0 operation

The FOX portable pumps are controlled and monitored via the LCS 2.0 (Logic Control System) control and instrument panel with integrated colour display. The logically designed operating structure disencumbers the operator to the best possible degree: The operator immediately receives information about the current status, immediate feedback on any malfunctions or operating errors, and suggestions for proper handling.

Lighting

Integrated anti-glare backlight of the control and instrument panel. Strong LED floodlight, height adjustable and removable, with spiral cable for maximum flexibility. Standard additional illumination at the filler neck of the fuel tank.

Carrying frame

Ergonomic, rubberized carrying handles for perfect comfort. Thanks to the foldable handles, the portable pump can be carried at each handle with both hands, and in operation there is no risk of tripping. Standard bracket for STORZ coupling spanner.

Fuel tank

Fuel tank with 20 l (5.3 US gal) capacity for long operations. The portable pumps can and should be refuelled during operation. This is approved and certified by TÜV.

FIRECAN

Standard FIRECAN socket for connection to a separate remote control or to a vehicle.

Recommended accessories for FOX and FOX S**RLS lighting system**

The RLS lighting system can be mounted directly on the portable pump, power is supplied via a single outlet.

Detachable wheels

The removable pair of wheels can be installed quickly by one person without tools and facilitates the transportation of the portable pump by just one person instead of four. Sockets for charge conservation 2-pin in accordance with DIN 14690, 2-pin MAGCODE, 3-pin BEOS

Tank filter

The tank filter prevents contamination of the tank.

NATO 12 V jump-start socket

Jump-start socket for starting the portable pump in the event of a dead battery.

Chargers and charge controller

In order to ensure a full battery with the longest possible service life, permanent charging of the battery is recommended. Besides the 230 V to 12 V charging device, a charge controller is also available for fixed installation in the vehicle, where a 24 V or 12 V vehicle battery can be used for charging the battery of the portable pump. Draining of the vehicle battery is prevented by undervoltage protection.

Toolkit

The toolkit includes not only spare spark plugs, but also the necessary tools for simple maintenance and oil changes.

Pump pressure governor

The pump pressure governor automatically regulates the engine speed. The set discharge pressure remains constant. The cavitation warning warns the operator early on of potential damage to the pump. Input pressure monitoring prevents empty suction in the supply line during pumping operations.



CC11X-PH10



CC11X-PP30



CC11X-PL52



CC11X-PP40



CC11X-PP99

Operation of the pump remotely or from the side

The control and instrument panel can also be mounted sideways, especially for installation in the vehicle. This ensures optimal operability of the pump here also. Alternatively, an additional operating panel can be remotely connected to the pump. Thus the pump and its functions can be operated from an alternate control point.

Supporting frame lighting

In the dark, the supporting frame lights illuminate the way to the scene and provide perfect visibility for all carriers.

Overheating protection

Mechanical overheat protection effectively protects the pump against overheating. The valve opens automatically if the water temperature reaches approx. 60 °C (15.6 °F). Once cooling to approx. 55 °C (12.8 °F) has occurred, the valve closes automatically.

Competition mode

For performance competitions, the pump can be operated fully automatically. This means that the pump starts with just the touch of a button on the control panel, and depending on the rules of the competition, reaches and maintains the desired nominal pressure in the shortest possible time.

Rotating discharge outlets

With the ability to rotate the discharge outlets continuously, hose management is significantly easier in tight spaces. For installation of the pump in the AT vehicle's deep space, this option is mandatory!

PC116	FOX
PC114	FOX S

Recommended accessories for FOX and FOX S

CC11X-PP30 Pressure governor

With intake pressure controller and cavitation warning.

CC11X-PP40 Thermal overheat protection

CC11X-PP99 Turnable pressure outlets

Set for both pressure outlets.

CC11X-PL52 Additional control panel LCS 2.0 incl. digital manometer

CC11X-PH10 Surrounding field illumination in carrying frame using LED lights

CC11X-PZ10 Transport wheels

2 pcs. air tyres.

CC11X-PZ60 Bracket for lighthouse RLS

Detachable power supply with integrated socket.

CC11X-PZ20 Set of tools

KR11X-PE60 Battery charging unit

MAGCODE, ACCTIVA easy 1204, 2-pole, input 110-230 V, 50-60 Hz

Portable fire pumps FOX and FOX S

Technical Data		
	FOX	FOX S
Pump:	Single-stage centrifugal pump made of lightweight alloy Curved impeller blades and diffuser with spiral housing Shaft seal with maintenance-free mechanical shaft seal Direct drive from the engine	
Performance (at 3 m suction lift):	PFPN 10-1,500 1,000 l/min at 15 bar (264.2 US gpm at 217.6 psi) 1,650 l/min at 10 bar (435.9 US gpm at 145 psi) 2,100 l/min at 4 bar (554.8 US gpm at 58 psi) Output power 2,250 l/min at 4 bar (594.4 US gpm at 58 psi) and 1.5 m (4.9 ft) suction lift Cut-off pressure 16.5 bar (239.3 psi)	PFPN 10-1,000 1,050 l/min at 10 bar (277.4 US gpm at 145 psi) 1,200 l/min at 8 bar (317 US gpm at 116 psi) 2,000 l/min at 2 bar (528.3 US gpm at 29 psi) Output power 2,050 l/min at 2 bar (541.6 US gpm at 29 psi) and 1.5 m (4.9 ft) suction lift Cut-off pressure 15.5 bar (224.8 psi)
Priming pump:	Piston priming pump with magnetic clutch and automatic control	
Propulsion engine:	BRP Rotax R3 cylinder 4-stroke engine, 899 cm ³ (54.9 in ³) 48 kW output	BRP Rotax R2 cylinder 4-stroke engine, 599 cm ³ (36.7 in ³) 29 kW output
Sound pressure level:	PFPN 10-1500: 95.8 dB	PFPN 10-1000: 94.5 dB
Dimensions:	L x W x H: 926 mm x 636 mm x 845 mm (35.5 x 25 x 33.3 in)	
Weight:	Operational: 166 kg (366 lb) in accordance with EN 14466	Operational: 150 kg (330.7 lb) in accordance with EN 14466
Fuel tank content:	20 l (5.3 US gal) (ROZ 95 or ASPEN 4t)	
Operating time at normal output:	approx. 1.5 h	approx. 2 h
Refueling in operation:	Accessory-free direct filling of the fuel tank during operation, TÜV tested and certified	
Plug Exhaust gas hose:	DN50	
Connections:	Suction side: 4½" (Storz A) Discharge side: 2x 2½" (Storz B)	
Standard version:	LCS 2.0 control panel with colour display Detachable LED headlights with spiral cable Tank filler neck illumination FIRECAN - data interface Holder for STORZ coupling spanner at the suction inlet Storage for small devices such as radios next to the control panel	
Options (excerpt):	Pump pressure governor with inlet pressure monitoring and cavitation warning Overheat protection Rotatable discharge outlet Detachable wheel set DIN, Magcode and BEOS sockets for charge retention NATO external starter socket Lighting in the carrying frame for improved visibility during manual transport Connection for Rosenbauer RLS lighting head Lateral operation with digital pressure gauges Detached, additional operation as an additional control point, e.g. for in-vehicle installation Competition mode for competition use Tool kit Double USB socket	
Installation in vehicles:	Can be installed in locker 1 or 2 of the Rosenbauer AT according to the released list of approved chassis variants, the optional rotatable discharge outlet is a prerequisite for this. Separate check required for other vehicles	



Portable fire pump OTTER

PORTABLE FIRE PUMP MODEL OTTER

OTTER, the light portable pump combines high pumping capacity with compact dimensions and a weight of only 66 kg (1,455 lb). The spherical impeller is attached directly to the shaft end, and, together with the control device integrated in the housing, it ensures maximum efficiency of the pump. Priming is done by a manual piston pump.

Certified as to EN 14466 for PFPN 6-500.

Technical data	
Pump:	single-stage centrifugal pump made from corrosion-resistant, anodized light metal
Pump output (at 3 m suction height):	<ul style="list-style-type: none"> ▪ 500 l/min at 6 bar (132 US gal at 87 psi) ▪ 800 l/min at 5 bar (211 US gal at 72.5 psi) ▪ 1,000 l/min at 4 bar (264 US gal at 58 psi) ▪ max. 1,100 l/min at 3 bar and 1.5 m suction height (290 US gal at 43.5 psi)
Priming pump:	manual piston suction pump, max. suction height: 7.5 m (295 in)
Engine:	Briggs&Stratton V2 cylinder, 4-stroke OHV gasoline engine, output 13 kW (18 PS) at 3600 min ⁻¹ , pressure-feed lubricating system with outside filter element for simple maintenance
Dimensions (L x W x H):	510 x 560 x 630 mm (20 x 22 x 24.8 in)
Weight:	<ul style="list-style-type: none"> ▪ dry: 58 kg (127.9 lb) ▪ ready to operate: 66 kg (145.5 lb)
Connections:	<ul style="list-style-type: none"> ▪ suction: 2½" (Storz B) ▪ pressure: 2½" (Storz B)

Ideal for youth fire brigades.

KR112

PORTABLE FIRE PUMP OTTER DIESEL

Certified as to EN 14466. The light portable pump with a robust, reliable diesel engine.



Portable fire pump OTTER Diesel

Technical data	
Pump:	single-stage centrifugal pump made from corrosion-resistant, anodized light metal
Pump output (at 3 m suction height):	<ul style="list-style-type: none"> ▪ 500 l/min at 5 bar (132 US gal at 72.5 psi) ▪ 700 l/min at 4 bar (184 US gal at 58 psi) ▪ max. 1,000 l/min (264 US gal) with free discharge
Priming pump:	manual piston suction pump, max. suction height: 7.5 m (295 in)
Engine:	HATZ 1-cylinder 4-stroke diesel engine, output 10.5 kW (14 PS) at 3600 min ⁻¹
Dimensions (L x W x H):	765 x 560 x 580 mm (30.1 x 22 x 22,8 in)
Weight:	<ul style="list-style-type: none"> ▪ dry: 152 kg (335.1 lb) ▪ ready to operate: 160 kg (352.7 lb)
Connections:	<ul style="list-style-type: none"> ▪ suction: 2½" (Storz B) ▪ pressure: 2½" (Storz B)

KR131

PORTABLE FIRE PUMP MODEL BEAVER

The portable pump BEAVER is certified as to EN 14466 for PFPN 10 -750. It features a low weight and small dimensions and is equipped with an innovative priming pump. The BEAVER portable pump combines a high output of 750 l/min at 10 bar (189.1 US gal at 150 psi) with small dimensions and an weight of just 112 kg (247 lb). So the BEAVER can be transported by just two firefighters.

Innovative solutions

The tank system is striking already at first glance. The BEAVER does not have a fixed tank. It is operated exclusively via an external canister tank, which can be conveniently attached to the support frame. The BEAVER can be used for up to 2 hours in full load mode in combination with a 20 l (5.3 US gal) petrol canister. Furthermore, it is also possible to replace the empty canister with a full one during operation. A simple solution with maximum safety for the fireman. The newly developed wing cell priming pump can be switched on manually. It impresses with its short suction time and allows suction heights of up to 9 m (16.4 ft).



Portable fire pump BEAVER

Technical data

Pump:	<ul style="list-style-type: none"> ▪ Single-stage light alloy centrifugal pump ▪ Curved impeller blades and diffuser with spiral housing ▪ Shaft sealing via maintenance-free axial face seal
Flow rate (at 3 m suction height):	<p>PFPN 10-750</p> <ul style="list-style-type: none"> ▪ 650 l/min at 12 bar (172 US gpm at 175 psi) ▪ 850 l/min at 10 bar (225 US pgm at 150 psi) ▪ 1,150 l/min at 6 bar (305 US pgm at 87 psi) ▪ Free discharge operation: 1,400 l/min at 4 bar and 1.5 m suction height (370 US pgm at 58 psi and 39 in suction height) ▪ Closing pressure 14 bar (205 psi)
Priming pump:	semi-automatic sliding vane priming pump
Engine:	Briggs&Stratton V2-cylinder 4-stroke engine, 993 cm ³ , output 26 kW
Dimensions (L x W x H):	731 x 545 x 656 mm (28.9 x 21.5 x 25.8 in)
Weight:	Ready for operation: 125 kg (275.6 lb) acc. to EN 14466 incl. 20 l (5.3 US gal) fuel tank, 133 kg (293.2 lb) with full 20 l (5.3 US gal) tank
Connections:	<ul style="list-style-type: none"> ▪ suction: 4½" (Storz A) ▪ pressure: 2x 2½" (Storz B)
Fuel tank:	no fuel tank on the pump itself, supply over external fuel can problem-free canister change under full load possible
Options (excerpt):	<ul style="list-style-type: none"> ▪ Overheat protection ▪ Recoil starter ▪ Around the pump foam admixing system



**POWER STATION
POWER GENERATORS
LIGHTING EQUIPMENT**

8



RTE PS 2 POWER STATION THE BATTERY-POWERED ENERGY SOURCE

Technical operations often require the use of electrically powered tools such as submersible pumps, combi hammers and rescue equipment. However, electric appliances like high-performance fans may also be needed for firefighting missions. A lighting system is almost always needed. Rosenbauer has developed the RTE PS 2 Power Station – a compact power supply with zero emissions – to allow such appliances to be used even more flexibly.

Emission-free, portable and easy to handle

At the core of the RTE PS 2 Power Station is a high-performance battery pack that is suitable for use by standard fire departments. With its 2 kWh capacity and 2,000 W output power, it can supply electrical devices with energy for long periods of time. What's more, it's completely silent and produces zero exhaust gases. The Power Station is portable, too. Its large wheels and trolley handle make it easy to transport over long distances. The robust housing makes it resilient enough to withstand the toughest conditions. The Rosenbauer Power Station can be charged via any standard household socket, the on-board power supply on an emergency vehicle, or even using the power of the sun via optional solar panels. In other words, the RTE PS 2 Power Station is the ultimate modern energy source for firefighting operations.

Not just clean, but self-sufficient too.

For those who don't want to be dependent on electricity from the grid, vehicles or other generators, Rosenbauer provides photovoltaic panels as accessories for its Power Station. Each individual panel provides a maximum of 350 W power. On a sunny day, it takes just 3 hours for the power from two panels to fully charge the 2 kWh battery of the RTE PS 2 Power Station.

Greater safety and rapid set-up times.

As the power supply does not emit any exhaust gases, the RTE PS 2 Power Station can be used absolutely anywhere, including indoors. It is also highly mobile so that it can be quickly transported to where it is needed, thus avoiding the need to roll out power cables over long distances.

2 x 15 W wireless charging

For fast inductive charging, e.g. smartphones

Integrated LED ambience lighting

For visibility of the battery pack, lighting up the immediate surroundings and better usability

Shockproof housing

Bumpers made of high-quality rubber are attached to the edges and corners of the Power Station protect it against knocks.

120 W on-board voltage socket

For all 12 V DC devices with a plug for an automobile power outlet (cigarette lighter), max. 10 A

3 x DC outputs

1 x 12 V/25 A
and 2 x 12 V/3 A

Fast Charging USB-C-Port 60 W

Connection for fast charging of smaller battery devices with up to 60 W charging power

4 x USB-A socket 15 W

For charging powerbanks and other smaller battery devices with up to 15 W charging power

2 x 2,000 W domestic sockets

Sockets with country-specific plug type and voltage output (max. 230 V/8 A)



Trolley function

The extendable handle and large, soft and antistatic rubber wheels make it easy to pull the Power Station over rough ground.

Integrated inverter

An inverter provides single-phase alternating current at all AC outlets.

Integrated solar charging controller

An inbuilt control unit regulates the charging currents of the optional photovoltaic panels.



Ergonomic handles

Large handles for a secure grip, even when wearing gloves.

Lithium iron phosphate battery

Long-life LiFePO⁴ battery cells store electrical energy inside.

Charging ports

For charging in the vehicle using a power cable or photovoltaic panel.

Technical specifications

Battery capacity	2,000 Wh, 40 Ah
Power output	2,000 W, output possible at one socket
Battery type	LiFePO ⁴ fire safe / 3,500 cycles
Voltage range/ frequency	240 V / 50 Hz
Voltage stability	< 5 %
Short-circuit protection	yes
Overtemperature protection	yes
Operating noise < 1,500 W	45 dB
Protection class	IP 33
Operating temperature	Power output between -10 °C (14 °F) and +45 °C (113 °F) Charging between 0 °C (32 °F) and +45 °C (113 °F)
Charging time	<ul style="list-style-type: none"> ▪ Mains: approx. 5 h ▪ Vehicle: approx. 20 h/12 V on-board network or approx. 10 h/24 V on-board network ▪ Solar panel: approx. 6 h/1 panel à 350 W or 3 h/2 panels à 350 W
Dimensions (W x H x D)	515 x 440 x 330 mm (20.3 x 17.3 x 13 ft)
Weight	31.5 kg (69.5 lb)

Exemplary appliances you can run with the RTE PS 2 Power Station

With its 2 kWh capacity and 2,000 W output power, the RTE PS 2 Power Station provides the energy you need for all manner of applications. It can be used to operate numerous single-phase electrical devices, including submersible pumps, high-performance fans and rescue equipment, for an hour or more.



High-performance fan
1,300 W 1:32 h



Projector
250 W, 8 h



Submersible pump
1,900 W, 1:03 h



Electric grill
1,500 W, 1:20 h

PRIMARY USE



Combi hammer
1,050, W 1:54 h



Wet vacuum cleaner
2,000 W, 1 h



LED spotlight
50 W, 40 h



Rescue equipment
1,500 W, 1:20 h



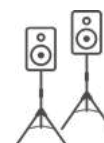
SECONDARY USE



Refrigerator
180 W, 11:07 h



Coffee machine
1,200 W, 1:40 h



Outdoor stereo system
400 W, 5 h

It is also possible to operate or charge various small electrical appliances or smart devices.

RTE PS 2 Power Station

- 319520** EU version - with 2x SCHUKO sockets (230 V/50 Hz)
- 319521** US version - with 6x NEMA sockets (110 V/60 Hz)
- 319523** EU version - with 2x SCHUKO IP44 sockets (230 V/50 Hz)
- 319524** EU version - with 2x sockets type 23 IP44 (230 V/50 Hz)
- 319525** EU version - with 2x sockets type FR/BEL IP44 (230 V/50 Hz)
- 319526** EU version - with 1x CEE IP44 sockets (230 V/50 Hz)
- 319527** EU version - with 1x SCHUKO IP68 sockets (230 V/50 Hz)

RTE PS 2 Power Station accessories

- 319531** Solar panel, a PV panel with P_{MAX} = 350 W charging power
- 319536** Socket adapter CEE 0,3 m (1 ft)
- 319537** Socket adapter CEE without cable
- 312318** LED floodlight 50 W
- 312315** LED floodlight 180 W
- 314001** Tripod
- 315560** Cable reel 30 m (100 ft)
- 25552B-001** Holder for RTE PS 2 Power Station
Ensures a safe storage in vehicles.



319531

BASIC PRINCIPLE

If an electrical conductor (e.g. wire coil) moves through the field lines of a magnetic field, an electrical voltage is induced in this conductor (induction). It is irrelevant whether it is the electrical conductor or the magnetic field that is moving. This principle of induction is used in generators for generating electricity. If a power generator is to supply a frequency of 50 Hertz (Hz), a rotation of 50 times per second must be achieved. This corresponds to 3,000 rpm with single-pole generators.

GENERATOR SYSTEMS

1. Synchronous generator

The synchronous generator requires a magnetic field (pole wheel), which is moved against the rotor (stator), to generate the voltage. The magnetic field is generated in DC (in the rotor), which is supplied from the auxiliary rotation (in the stator) by means of rectifiers and slip rings or contact brushes. The synchronous generator can deliver active and reactive power (see below) without additional measures.

Advantages

- Very good shock load behaviour in consumers with high starting current due to the magnetic energy stored in the rotor
- Highly efficient

Disadvantages

- Slightly more expensive due to elaborate fabrication

2. Asynchronous generator (ASG)

In an ASG, the magnetic flux is generated by the differential speed between the rotating rotor and the magnetic flux present in the stator. Due to this slip, the frequency is below (asynchronous) to the drive speed. The asynchronous generator owes its name to this fact. The rotor does not require winding and thus no elements for power transmission. In the iron core, only a squirrel-cage winding is necessary. In the asynchronous generator, a capacitor is connected in parallel with the current coil and supplies the excitation current required by the asynchronous machine as a reactive current. The initiation of the self-excitation begins with the residual magnetism in the rotor and oscillates between capacitor and stator winding until the nominal current is reached.

Advantages

- More economical in production
- Mostly maintenance-free

Disadvantages

- Some shortcomings with high starting currents

THE ELECTRICAL MEASUREMENT PARAMETERS OF THE GENERATOR

1. Power

The most important criterion for assessing a power generator is the power, i.e. its ability to supply electrical power to the connected consumers. Depending on the type and principle of operation of the electrical appliances, a distinction is made between:

- Active power (expressed in watts, or kilowatts)
- Apparent power (expressed in VA or kVA)
- Reactive power

- **Active power** produces a directly usable effect in electrical consumers, e.g. heating of a heating coil, light emitted by incandescent lamps or operation of an electric motor. The absorbed active power is thus converted into heat, light or mechanical activity.
- **Apparent power** is the geometric sum of active and reactive power. It can be determined as a product of voltage and current. Power generators for universal application must be capable of delivering both active and reactive power. Rosenbauer power generators are characterized by above-average reactive power. This means in practice that not only lighting equipment is adequately supplied with active power, but also the motors of fans, pumps and the like run problem-free with Rosenbauer power generators. Rosenbauer power generators have the ideal power ratio between active and apparent power (Watt to Volt-Ampere) for universal use.
- **Reactive power** is required to initiate magnetic fields in the coils of electric motors (e.g. submersible pumps), transformers and pre-reactors. Reactive power is not really "consumed". It flows back and forth between the generator and the consumer and acts like a catalyst. Insofar as electrical devices contain such assemblies, they consume reactive power in addition to real power. On the other hand, all devices which convert electrical energy exclusively into heat, i.e. do not require magnetic fields for their function, are active users.

The power factor $\cos \varphi$

All inductive consumers, such as motors, generators and transformers, have a power factor $\cos \varphi$. In a coil which is flowed through by alternating current, a magnetic field builds up, the lines of force of which intersect the windings of the own coil. A self-induction voltage is generated in the coil, which counteracts its source. The current and voltage are thereby shifted in time. This process is called a phase shift. Power tools have a power factor of about 0.9-1.0, and thus it is neglected. Three-phase and alternating current motors, on the other hand, have a power factor of around 0.8, which must always be considered.

The active power is smaller than the apparent power by the power factor $\cos \varphi$ ($= 0.8$). Therefore, e.g. a generator with an effective power of 10.88 kW can output an apparent power of 13.6 kVA.

Apparent power: indicated in VA or kVA

Active power: indicated in W or kW

Apparent power $\times \cos \varphi$ ($= 0.8$) = Active power

2. Voltage

This is stated in volts and is 230 V for alternating current devices in Europe and 400 V for three-phase generators. If this nominal value is significantly below that of the consumer device, the power of the device is reduced. Exceeding the nominal value causes additional heating and thus an overload.

The voltage behaviour of generators

The voltage output by generators, including all tolerances, is designed in such a way that conventional consumers can be operated without any issues. It should be at least within the tolerance of $\pm 10\%$. Rosenbauer power generators are characterized by a particularly stable voltage behaviour.

Common voltage regulation for fire brigade generators

Compound control

This causes a load-dependent excitation, i.e. as soon as the generator is loaded, the load current flows through a current transformer (compound transformer) and generates a current on the secondary side, which causes rectified exciter support in the auxiliary excitation winding. Without a load, the compound excitation has no effect. In this situation, the basic excitation alone is responsible for maintaining the proper open circuit voltage.

Advantages

- Simple construction

Disadvantages

- Greater weight and larger volume
- Voltage behaviour average, can be problematic with electronic devices

Electronic control

An electronic controller is connected to the excitation circuit of the generator which, depending on the voltage situation, increases or decreases the excitation current. In this way, the voltage is kept constant over the entire power range with a tolerance of $\pm 2.5\%$. Rosenbauer power generators have a voltage stability of just $\pm 1\%$ and are therefore also perfectly suitable for operating electronic devices.

Advantages

- Excellent voltage behaviour

Disadvantages

- Higher costs

ELECTRICAL SAFETY OF POWER GENERATORS

The most frequently used protective measure in the case of portable power generators is safety isolation.

Safety isolation

Series power generators from Rosenbauer are suitable as grid replacement systems without further measures being undertaken by the operator, because they comply with the "circuit separation" protective measure. The safety isolation is intended to prevent contact voltage from occurring between the housing of the connected consumer and the earth on the secondary side when the tool has a ground contact. At the ground contact, the voltage must drop below 50 V within 0.2 seconds. This can be implemented through the generator system or by switching off via an automatic circuit breaker. The resistance of all connected cables (extension cord, cord reel, etc.), i.e. the loop resistance, must not be greater than 1.5 Ohm in order to ensure that the tripping current is reliably applied. This means that, when extension lines or mobile distribution networks are used, their total length for a cross-section of 1.5 mm² must not exceed 60 m (196.9 ft), and max. 100 m (328.1 ft) for 2.5 mm². This protective measure is fully adequate, unless specified otherwise in the general safety regulations or if the devices are to be used for work with more stringent safety requirements.

Safety cable lengths

For the maximum cable lengths between power generator and consumer(s), the following cable lengths are given as guide values:

- When connecting a consumer, the maximum cable length between the generator and the consumer may not exceed 60 m (196.9 ft) for a cable cross-section of 1.5 mm² and 100 m (328.1 ft) for 2.5 mm².
- When several consumers are connected, the maximum cable length between the generator and the two most distant consumers may be 2 x 30 m (60 m or 196.9 ft in total) with a cable cross-section of 1.5 mm² and 100 m (328.1 ft) total with a cable cross-section of 2.5 mm²
- When several consumers are connected via a portable intermediate distributor (cord reel), the maximum cable length between the generator and the distributor plus the cable length between the two most distant consumers can be 30 m + 2 x 15 m (60 m or 196.9 ft in total) for a cable cross-section of 1.5 mm² and 50 m + 2 x 25 m (100 m or 328.1 ft in total) for a cable cross-section of 2.5 mm².

ISO monitoring

The IEC 60364-7-717 standard regulates the electrical performance of low voltage systems of vehicles within the EU. Section 717.411.6.2 provides a clear requirement for the use of isolation monitoring when using an isolated network (such as a portable power generator). This isolation monitor indicates the initial fault (warning light/buzzer), but is definitively not required to switch off the power generator. As it is impossible to prevent power generators without isolation monitoring to be installed in vehicles at a later date, ROSENBAUER power generators are equipped with insulation monitoring as standard.

Protection class

What are the different types of protection classes?

IP X X

First digit

Protection against foreign bodies and contact

- 0 Unprotected
- 1 Foreign bodies > 50.0 mm (> 1.9 in)
- 2 Foreign bodies > 12.5 mm (> 0.5 in)
- 3 Foreign bodies > 2.5 mm (> 0.1 in)
- 4 Foreign bodies > 1.0 mm (> 0.04 in)
- 5 Dust-protected
- 6 Dust-proof

Second digit

Protection against water

- 0 Unprotected
- 1 Dripping water vertical
- 2 Dripping water at an angle of 15° to the vertical
- 3 Dripping water at an angle of 60° to the vertical
- 4 Spray water from all directions
- 5 Water sprays from all directions
- 6 Heavy water sprays from all directions
- 7 Temporary submergence
- 8 Continuous submergence



RS 14 AND RS 14 SUPER SILENT POWER GENERATORS

The RS 14 power generator series combines powerful performance with a modern operating concept. Whether day or night, hot or cold, on the mountain or in the valley: the RS 14 and RS 14 SUPER SILENT generators always supply the necessary power.

The power generators of the RS 14 series can be used anywhere, any time. Even in extremely high ambient temperatures that can easily cause the instrument and fuel to overheat, the RS 14 power generators are durable and lasting.

Performance and functionality in every detail

- Reliable engine with high-quality stainless steel exhaust system for low-noise and lifelong operation
- Extremely powerful synchronous generator and generator controller for high starting currents
- Automatic choke for the best starting characteristics under all conditions
- Impact-resistant GFRP housing
- Powerful low-maintenance batteries
- Easily accessible circuit breakers
- Practical, tried-and-tested manual starting device for start-up without a battery or with a defective battery

Maximum durability. Optimized for heavy starters.

The new RS 14 power generators from Rosenbauer are the powerhouses of firefighting operations. These power generators and generator governors not only handle maximum loads, but are also oriented toward the operation of heavy starters unlike any other unit on the market. They allow firefighters to simultaneously operate devices with longer start-up times without problems (e.g. multiple submersible pumps).

Innovative fueling concept

Until now, firefighters had to manually switch to canister operation for external refueling using a 3-way valve. This is a thing of the past now. Pressing the "External refueling" button activates a fuel pump and supplies the power generator with fuel from the canister, regardless of the elevation of the canister. The innovative fuel concept also allows the RS 14 to be used in extremely high ambient temperatures.

Safe refueling made easy

In order not to take any risks when refueling, an optimized refueling area with a compact refueling corner is essential.

- Low-lying tank
- Ergonomically positioned, large refueling opening (separated and deep)
- Connection for external refueling set
- Safety fuel cap
- Tank protected in high-strength aluminum carrying pan
- Considerably lower thermal load
- LED lighting for a better overview
- Visual and audio warnings

When things get dicey: emergency operation

Should the battery or electronics decide to go on strike, the RS 14 and RS 14 SUPER SILENT can be started very easily using the pull starter. Even in the event of a fault, the power generators are always ready for use and power is available at the sockets.

Less noise, less consumption. With ECO mode.

The ECO mode (electronic speed reduction) ensures minimal noise and lower fuel consumption. If consumers are switched off, the power generator runs at reduced speed with low noise emission. Once consumers are switched on, the motor automatically increases to the nominal speed and the full output is available immediately. ECO mode is available as an option for all RS 14 series power generators.

For small consumers: the new 12 V connection

A small yet incredibly practical detail is the 12 V constant voltage source, which from now on is standard on the front side of every RS 14 series. It is not only intended for connecting RLS1000 and RLS2000 LED lighting heads; this 12 V plug is also an additional energy source for small consumers, such as chargers.

Powerful injection engine

The RS 14 and RS 14 SUPER SILENT power generators are equipped with a powerful Briggs & Stratton injection engine. This further optimizes engine performance in many areas:

- Slightly more extra power (approx. 1 HP)
- Automatic height compensation
- Precise speed control in all conditions
- Improvement in hot use
- Lower consumption
- Easier emergency operation through elimination of the choke function
- CAN communication throughout



Optimized for heavy starters



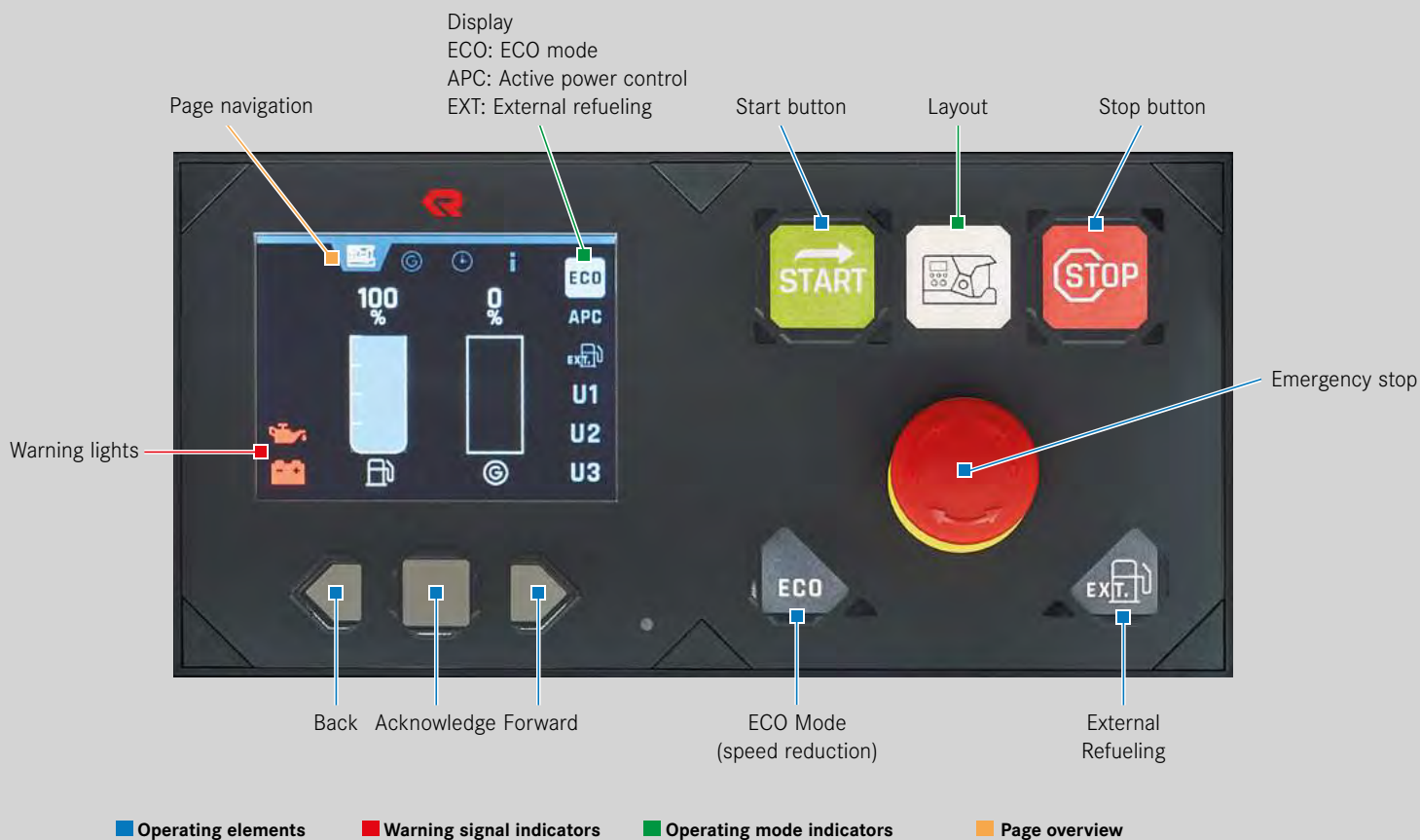
Refueling corner



Activation of ECO mode and external refueling



12 V connection, e.g. for headlight operation



THE OPERATING CONCEPT OF THE RS 14 POWER GENERATOR

It is simple, but with a significantly higher information content. It is completely new, yet entirely familiar to firefighters. The digital control display delivers detailed information about utilization, voltage, and fuel level. Designed in the Rosenbauer visual style, intuitive, uniform, and therefore even simpler operation is now possible, from the portable fire pump through the AT and to the power generator.

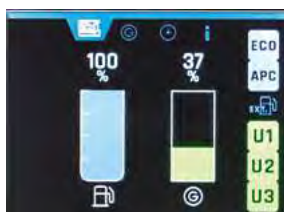
Digital display

The indicator display is digital. This means the display is more modern, intuitive, larger, and more flexible. The error display has also been improved. Errors are now displayed using standardized text-based messages.

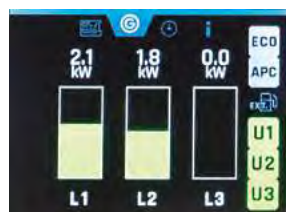
Four display views:

The main view, the detailed view, expert view, and service view not only deliver much more information than ever before, they are also easy to understand and perfectly legible for the user.

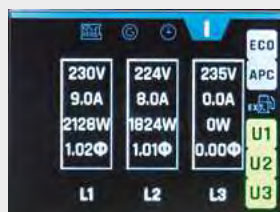
Four display views:



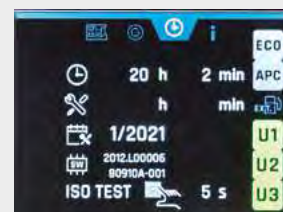
1. The **main view** provides the most important information at a glance:
 - Fuel level
 - Overall load
 - Voltage within permissible range



2. The **detailed view** shows the load distribution, i.e. the power per phase and whether the voltage is within the permissible range.



3. In the **expert view**, you can see the current status of the connected consumers with even more details. Voltage, current, active power, and cosine phi are broken down precisely for each phase.



4. The **service view** contains the operating hours display and the test routine for the insulation monitor.

RS 14 and RS 14 SUPER SILENT

RS 14

319642-001	RS 14
319606-001	Color option red – RAL 3000
319606-002	Color option yellow – RAL 1012
319606-003	Color option lime green
319606-004	Color option white – RAL 9010
319606-005	Color option ruby red – RAL 3003

RS 14 SUPER SILENT

Innovative technology ensures extremely low noise emissions without sacrificing performance, functionality, or safety:

- Acoustically optimized exhaust system
- Completely newly developed suction system
- Fully GFRP housing for additional sound insulation
- LED lighting of the sockets and the tank filling area ensures additional safety when operating the generator
- High-quality workmanship paired with high technical quality

319643-001	RS 14 SUPER SILENT
319607-001	Color option red – RAL 3000
319607-002	Color option yellow – RAL 1012
319607-003	Color option lime green
319607-004	Color option white – RAL 9010
319607-005	Color option ruby red – RAL 3003

Options for RS 14 and RS 14 SUPER SILENT

319608-001 Remote monitoring FIRECAN (DIN14700)

For controlling and monitoring the power generator from a central control station in the firefighting vehicle. The connection is achieved via the standardized FIRECAN interface. Communication between the power generator and the vehicle takes place via CAN bus. Functionality with different vehicle manufacturers is ensured thanks to FIRECAN compatibility.

Example functions:

- Remote start/stop
- Warnings (oil pressure, temperature etc.)
- Fuel level

319610-003 ECO mode (automatic speed reduction)

Ensures quieter running when not loaded. Without a load, the power generator runs quietly at reduced speed. Once consumers are switched on or plugged in, the motor automatically increases to nominal speed. Full power is available immediately. That means less noise, less consumption, and therefore longer running times.

319609-001 Polarity reversal switch for 400 V CEE socket

To change the direction of rotation of a 400 V CEE socket.

319622-001 Building feed switch for emergency power supply (front-side)

The RS 14 power generators can easily be used as an emergency power supply for buildings. If the power fails, the double-throw "direct supply - system supply" switch toggles the energy from the front-side sockets to the feed socket on the front face.

319622-002 Building feed switch for emergency power supply (front-side)

Feed-in socket situated on the front, replaces a 400 V CEE socket.



319642-001 / 319606-002



319643-001 / 319607-001



319608-001



319609-001



319622-001


319622-001

10 m (32.8 ft) supply cable, including adapter
16/32A and 32/63A included in delivery contents


319615-001

312307E03 / 319614-001
Insulation monitoring

Optical and acoustic "warnings" on the display; the sockets will continue to be powered. To monitor all connected consumers for insulation errors and occurrence of dangerous leakage currents. Measures the resistance between ground, neutral conductor and the phase of the attached consumer. Requirement of DIN 14685-1 and IEC 60364-7-717 for power generators in vehicles within the EU.

319611-001 Insulation monitoring shutdown prevention

Shutdown prevention; the warning can be acknowledged acoustically.

319611-002 Insulation monitoring shutdown

The power generator switches off automatically if an insulation fault occurs.

319616-001 Battery temperature monitoring

For optimum battery charging, some chargers need to transfer the battery temperature to the vehicle. This is transmitted via the FIRECAN interface that is built-in as standard. This option is mandatory for non-Rosenbauer vehicles.

319613-001 CITY three-phase socket, 400 V CEE

Additional 3rd three-phase socket, situated on the front.

319615-001 Magcode charging socket
319625-001 BEOS charging socket
319621-001 USB charging socket
319627-001 12 V plug for connecting RLS- lighting heads and small consumers

A small yet incredibly practical detail is the 12 V constant voltage source, which from now on is standard on the front side of every RS 14 series. It is not only intended for connecting RLS1000 and RLS2000 LED lighting heads, this 12 V plug is also an additional energy source for small consumers, such as chargers.

LED lighting

The new power generators can optionally be equipped with the multifunctional RLS1000 and RLS2000 LED light heads. High-power LED technology for illumination of the unit and the scene: 30 high power LEDs in 6 adjustable brightness levels, with signal flashing light in 5 different colors and lamp head swiveling in all directions.

312307E03 RLS1000 LED lighting head
312305E01 RLS2000 LED lighting head
319614-001 Socket for RLS1000 LED lighting head

RS 14 and RS 14 SUPER SILENT

Technical data		
	RS 14	RS 14 SUPER SILENT
General		
Use:	Fire departments or users who require a higher level of protection	
Specifications:	ÖBFV-RL ET-01 8 kVA power generator with increased performance, DIN 14685-1	
Unit		
Dimensions:	820 x 440 x 580 mm (8 DIN frame) (2.7 x 1.4 x 1.9 ft)	
Weight:	144 kg (317.5 lb) including fuel for 1.5 operating hours	149.5 kg (329.6 lb) including fuel for 1.5 operating hours
Output:	Pel, 3~ = 13.6 kVA/cos φ = 0.8 / 10.88 kW Pel, 1~ = 4.5 kVA/cos φ = 0.8 / 3.6 kW Σ Pel, 1~ = 3 x 4.5 kVA = 13.6 kVA	
Nominal current:	19.7 A 3~/29.6 A 1~	
Line protection:	16 A 3~/16 A 1~	
Noise level L_{WA} :	97.7 dB(A)	94.1 dB(A)
Sound pressure at 4 m (13.1 ft)	77.6 dB(A)	74.0 dB(A)
Protection class:	IP54	
Tank capacity:	12.0 l (3.2 US gal)	
Running time under full load:	approx. 2.5 hours	
Coating:	RAL 3000 (red) or RAL 1012 (yellow)	
External power supply:	12 V plug for vehicle connection	
Generator		
Type:	Synchronous with electronic controller	
Voltage:	230/400 V	
Voltage stability:	+/- 5%	
Frequency:	50 Hz	
Power factor:	cos φ = 0.8	
Nominal current:	20.3 A 3~/30.4 A 1~	
Motor		
Manufacturer:	Briggs & Stratton Corporation, USA	
Type:	23 hp Vanguard EFI	
Type:	2-cylinder OHV 4-stroke gasoline engine, cool cleaner	
Control behavior:	+/- 5%	
Ignition:	electronic	
Fuel:	unleaded gasoline min. 91 ROZ	
Exhaust gases:	meets the 2002/88 EC exhaust gas standard	
Consumption:	approx. 6 l/h (1.6 US gal/h) under full load	
Fittings:	Manual pull starter, 12 V electrical starting device, battery 12 V / 18 Ah, oil pressure monitoring warning system, no shut-down, plug for external refueling	
Control box		
Fittings:	2 x water pressure-tight sockets 400 V	
	3 x water pressure-tight sockets 230 V	
	1 x AC circuit breaker 16 A 3-pin with neutral and monitoring	
	3 x AC circuit breakers 16 A 1-pin with neutral and monitoring	
	1 x CAN bus socket FIRE-CAN 7-pin (trickle charging and remote monitoring)	
Included in scope of delivery		
Tool bag:	2 spark plugs, 1 spark plug wrench, 1 screwdriver, 1 ground wire testing cord with testing tip	
User information:	with CE Declaration of Conformity, spare parts list, and circuit diagram	



RS 9 POWER GENERATOR 9 KVA IN 5-SERIES DIN FRAME

Especially developed for firefighters, this power generator meets all your requirements. The RS 9 combines maximum performance with the smallest dimensions and is 100% DIN 14685-1 compliant. Experience shows that a long running time and the simple handling of all operating elements are most important. The RS 9 meets these requirements perfectly.

840791 Rosenbauer 9 kVA power generator

Color: red - RAL 3000

84059201 Rosenbauer 9 kVA power generator

Color: yellow - RAL 1012

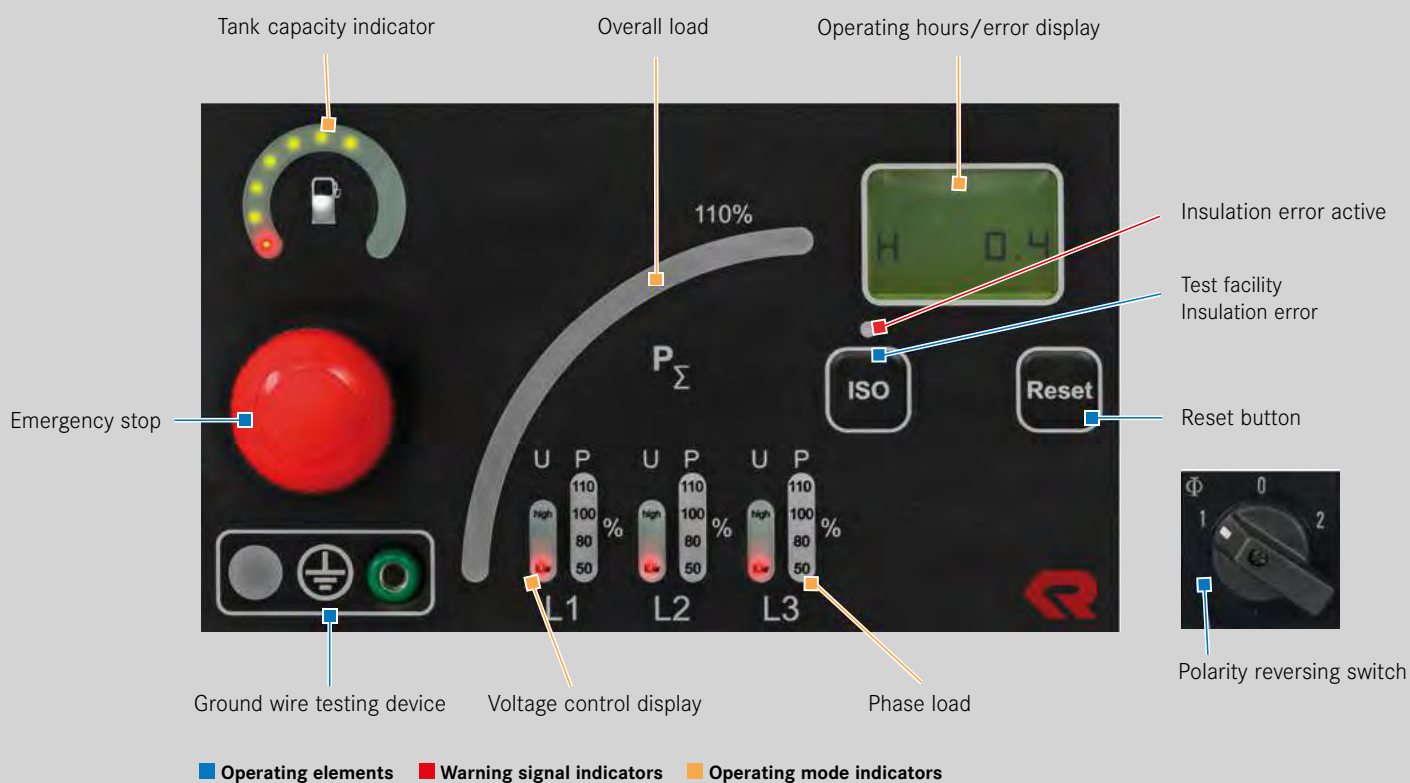
Maximum performance with minimum dimensions

- Powerful generator: high power output of 9 kVA 3-phase, $\cos \varphi = 0.8$
- Small dimensions: fits into the small DIN 5 frame
- Operationally safe: high operational safety, maintenance- and service-friendly, dirt-resistant
- Tried and tested engine: air-cooled Briggs & Stratton 4-cycle industrial engine.
- Supporting frame: robust tubular frame with new type of carrying frame for safe and ergonomic transport; cold and heat insulating, non-slip carrying handles.

Comfortable operation

- All operating elements arranged the front
- Standard electrical starting device
- Intuitive control panel - everything at a glance

CONTROL PANEL



RS 9 options**8406 12 Polarity reversing switch**

To change the direction of rotation of a 400 V CEE socket, 16 A, 3-phase.

Insulation monitoring

Optical and acoustic "warnings" on the display; the sockets will continue to be powered. To monitor all connected consumers for insulation errors and occurrence of dangerous leakage currents. Measures the resistance between ground, neutral conductor and the phase of the attached consumer. Requirement of DIN 14685-1 and IEC 60364-7-717 for power generators in vehicles within the EU.

8406 13 Insulation monitoring shutdown prevention

Shutdown prevention; the warning can be acknowledged acoustically. With additional test key for insulation monitoring.

8406 1301 Insulation monitoring shutdown

The power generator switches off automatically if an insulation fault occurs.

8406 14 NATO socket

For starting the power generator via a 2-pin socket, NATO standard.

8406 1502 FIRECAN remote monitoring

To control or monitor the power generator from a central control point in the firefighting vehicle. The connection is made via the standardized FIRECAN interface and includes an automatic choke on the power generator. Communication between the power generator and the vehicle takes place via CAN bus. Functionality with different vehicle manufacturers is ensured thanks to FIRECAN compatibility.

Example functions:

- Remote start/stop
- Warnings (oil pressure, temperature etc.)
- Power decrease
- Fuel level
- Fault indicator

8406 1501 Rosenbauer remote monitoring

To control or monitor the power generating set from a central control point in the firefighting vehicle. The connection is established via the Rosenbauer interface and contains an automatic choke for the power generating set. The power generator is controlled by individual analog electrical signals.

Example functions:

- Remote start/stop
- Warnings (oil pressure, temperature etc.)
- Power decrease
- Fuel level
- Fault indicator

31720A-001 Building feed for emergency power supply (front-side), feed socket situated on the front, replaces a 400 V CEE socket.

840648 Magcode charging socket**84064801 BEOS charging socket****840639 Special coating according to RAL color****840791**

RS 9, Color: red - RAL3000

**8406 12****8406 14****8406 1502****8406 1501****840648**



Tank ventilation for greater safety

Increased safety thanks to the ventilated tank

All Rosenbauer power generators are equipped with ventilated tanks. Operator safety is the top priority. When tanks are not vented, pressure can build up in the container. When opening, this can lead to injuries as a result of gasoline escaping.

Technical data

RS 9

General

Use:	Fire departments or users who require a higher level of protection
Specifications:	according to DIN 14685-1

Unit

Dimensions:	700 x 440 x 580 mm (5-series DIN frame) (2.3 x 1.4 x 1.9 ft)
Weight:	130 kg (286.6 lb) incl. tank filling
Output:	Pel, 3~ = 9 kVA/cos φ = 0.8/7 kW \sum Pel, 1~ = 5 kVA
Noise level L_{WA} :	95.3 dB(A)
Protection class:	IP44
Tank capacity:	10.5 l (2.8 US gal)
Running time under full load:	approx. 1.5 hrs at full load
Coating:	RAL 3000 (red) or RAL 1012 (yellow)

Generator

Type:	Synchronous generator with electronic controller
Voltage:	3 x 230 V/2 x 400 V
Voltage stability:	$\pm 1\%$
Frequency:	50 Hz
Power factor:	cos φ = 0.8
Nominal current:	11.6 A 3~
Protection class:	IP 54

Motor

Manufacturer:	Briggs & Stratton Corporation, USA
Type:	16 hp Vanguard
Type:	2-cylinder OHV 4-stroke gasoline engine
Output:	10.6 kW at 3.000 rpm (DIN 6271 B)
Control behavior:	$\pm 5\%$
Ignition:	electronic
Fuel:	unleaded gasoline min. 91 ROZ
Exhaust gases:	the engine complies with USA exhaust gas standard CARB 94
Consumption:	approx. 4.2 l/h (1.1 US gal/h)
Fittings:	Manual pull starter 12 V electrical starting device

Control box

Equipment:	2 x water pressure-tight three-phase sockets CEE 16 A, 400 V 3 x water pressure-tight Schuko sockets CEE 16 A, 230 V 1 x AC circuit breaker 16 A 3-pin with neutral 3 x AC circuit breakers 16 A 1-pin with neutral 1 x control panel with display for tank content, load, voltage and faults, protective conductor test device, emergency stop button, start/stop switch, charging socket
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Accessories

1 x tool bag:	1 x spark plug wrench, 1 x ground wire testing cord with testing tip, 2 x spark plugs
1 x operating instructions:	with circuit diagram, spare parts list and CE Declaration of Conformity

Accessories for generators

Exhaust gas deflector

For discharging exhaust gases upwards when setting up a power generator on a turntable ladder or aerial rescue device.

319617-001 Exhaust gas deflector
RS 14 and RS 14 SUPER SILENT

847521-001 Exhaust gas deflector RS 9

575079-001 Exhaust adapter
For lateral (45°) deflection of exhaust gases.

567978-001 Refueling set for 3-way stop cocks
1.5 m (4.9 ft) long hose with bayonet catch for canister operation

651103 Fuel canister, 20 l (5.3 US gal), red

651300 Filler neck
With 300 mm (1 ft) long flexible hose for fuel canister.

654400 Exhaust gas hose
Flexible, galvanized metal hose with connection parts in accordance with DIN 14752 (exhaust socket on one side, counter socket on the other side). With two heat-insulating wooden handles.
Diameter: 55 mm (2.2 in)
Length: 1.5 m (4.9 ft)

544561-001 Holder for exhaust gas hose
Acts as a spacer between hot exhaust hoses and sensitive surfaces.

315890 Socket distributor 400 V
Mobile plastic distributor 2 x 400 V, IP 44. With 3 m (9.8 ft) cable HO7RN-F 5G1 5 mm². Input socket 16 A, 5 p, 400 V. Equipped with 2 CEE 16 A, 400 V sockets.

538272 Starter battery, 12 V/18 AH, maintenance-free

654425 Trolley for power generator, DIN 8

871528-001 Wheel set for RS 14 and RS 14 SUPER SILENT
Enables easier handling and faster transport to the scene of the emergency. Thanks to the two transport wheels, a single crew member can easily transport the power generator to the scene of the emergency in just seconds.

871528-002 RS 9 wheel set



319617-001



567978-001 / 651103



651300



654400 / 544561-001



315890



Compact for carrying



Fold-out stabilizers

PORTABLE BATTERY-LED LIGHTING SYSTEMS RLS2000 AND RLS1000

- Rechargeable
- Compact
- Powerful
- Versatile use

The multifunctional LED lighting systems are used where light and power are difficult to come by. They are not only great for fire departments, but also for other emergency organizations, such as the police and disaster relief agencies.

The RLS2000 and RLS1000 have an integrated, high-performance battery which, depending on the version, can run for 8 hours at 100% light output without an external power supply. Unlimited deployment is possible with the use of an optional power adapter. This is how the powerful lighting system provides optimum lighting all through the night. A color temperature of 6,500 Kelvin offers daylight-like conditions in the middle of the night. The light output can be increased to 150% for 10 minutes with the Powerboost function.

RLS2000 and RLS1000

Intelligent battery management

With an integrated battery and 12/24 V charger, the RLS devices are also very practical to use. The RLS lighting systems have an integrated charging unit that not only monitors its own battery status, but also that of the donor battery (e.g. the vehicle battery). Charging is particularly easy. All you need is a cigarette lighter socket – plug in, charge, ready. All without an additional charger. The lighting system can be charged and operated from any 230 V socket with the optional power adapter.

All in a single system - simple and practical

- Up to 8 hours of operation at 100% light output without an additional power supply
- Height-adjustable up to 1.80 m (5.9 ft) lighting head height with quick-lock extension poles
- 4 x quick-lock extension poles (included in delivery) for a light head height of up to 1.80 m (5.9 ft)
- Lamp head can be swiveled in all directions
- Different colored flashing modes for different purposes, e.g. yellow for traffic safety, red to identify the operational center, and green as an assembly point for respiratory protection wearers
- 2 x integrated fold-out stabilizers for better stability on uneven surfaces
- 1 x 12/24 V charging cable with cigarette lighter connector, approx. 2 m (6.6 ft) included in delivery
- High-performance LEDs with special lens system plus multicolor LEDs
- Spotlight and floodlight illumination can be continuously adjusted using an integrated diffuser

RLS2000 – Perfect 360° illumination at the scene of an emergency

The fully flexible LED light head of the RLS2000 is another functional plus for this popular lighting system. Anything is possible with the multifunctional light head that moves in all directions: from a powerful spotlight for search and rescue operations to a 360° floodlight. Even a combination of the two is possible.

- Three flexible LED light panels provide 360° illumination as well as a variety of application possibilities in operation. The angle of inclination of each panel can be individually adjusted to any position.
- Changeable focus: For light output adapted to the respective situation – from a long light beam to wide floodlight
- Dimming function: The work light can be adapted as needed
- High-power LED technology: Maximum efficiency for the best light output
- Variable light output: The three panels can be switched on and off individually
- Flashing signal light: The RLS2000 is equipped with a flashing signal light in 4 different colors (red, green, yellow and blue)



Diffuser for the RLS1000 and RLS2000



3 x flexible LED panels



Height-adjustable with quick-lock system

Telescopically adjustable up to 1.80 m (5.9 ft) light head height



312305



312307



Flashing light in signal colors

312305 RLS2000 LED lighting system

- Battery: 12 V, 22 Ah lead gel
- Color temperature: 6,500 K (similar to daylight)
- Operating time: approx. 3 hours at 100% power of all 3 panels, approx. 10 hours at 40% light output
- Operating modes: ground lighting with spotlight or escape light, continuously adjustable
- Flashing light: in 4 colors (red, green, blue and yellow)
- Dimming function: adjustable in 10% steps or continuously adjustable
- Power boost: 150% lighting output for 10 minutes
- Luminous flux at 100% output: approx. 8,500 lumen
- Luminous flux at 150% output: approx. 12,000 lumen
- Protection class: IP54

Dimensions: 430 x 215 x 255 mm (1.4 x 0.7 x 0.8 ft)
Weight: 12.2 kg (26.9 lb)

3123051 RLS2000 Lion LED lighting system

- Battery: 14.4 V, 41.6 Ah lithium-ion battery
- Color temperature: 6,500 K (similar to daylight)
- Operating time: approx. 8 hours at 100% light output, approx. 16 hours at 50% light output, approx. 4.5 hours at 150% light output
- Operating modes: ground lighting with spotlight or escape light, continuously adjustable
- Flashing light: in 4 colors (red, green, blue and yellow)
- Dimming function: in 10% steps or steplessly
- Luminous flux at 100% output: approx. 8,500 lumen
- Luminous flux at 150% output: approx. 12,000 lumen
- Protection class: IP54

Dimensions: 430 x 215 x 255 mm (1.4 x 0.7 x 0.8 ft)
Weight: 9.3 kg (20.5 lb)

312307 RLS1000 LED lighting system

- Battery: 12 V, 22 Ah lead gel
- Color temperature: 6,500 K (similar to daylight)
- Operating time: approx. 8 hours at 100% light output, approx. 33 hours at 25% light output, approx. 6 hours at 125% light output
- Operating modes: ground lighting with spotlight or escape light, continuously adjustable
- Power boost: 150% lighting output for 10 minutes
- Flashing light: in 5 colors (red, green, blue, yellow and white)
- Dimming function: adjustable in 6 steps from 8% to 150% or continuously adjustable
- Luminous flux at 100% output: approx. 4,500 lumen
- Luminous flux at 150% output: approx. 6,600 lumen
- Protection class: IP54

Dimensions: 430 x 215 x 255 mm (1.4 x 0.7 x 0.8 ft)
Weight: 12 kg (26.5 lb)

3123071 RLS1000 Lion LED lighting system

- Battery: 14.4 V, 41.6 Ah lithium-ion battery
- Color temperature: 6,500 K (similar to daylight)
- Operating time: approx. 17 hrs at 100% light output, approx. 30 hrs at 50% light output, approx. 11 hrs at 150% light output
- Operating modes: ground lighting with spotlight or escape light, continuously adjustable
- Dimming function: adjustable in 6 steps from 8% to 125% or continuously adjustable
- Luminous flux at 100% output: approx. 4,500 lumen
- Luminous flux at 150% output: approx. 6,600 lumen
- Protection class: IP54

Dimensions: 430 x 215 x 255 mm (1.4 x 0.7 x 0.8 ft)
Weight: 9 kg (19.8 lb)

Accessories for RLS2000 and RLS1000

- 31230801 230 V power adapter**
312307E25 230 V power adapter, IP54
31230804 Tripod adapter for DIN mounting pin
 Allows the light head to be mounted on any DIN tripod.
31230805 3 m (9.8 ft) extension cord
312305E01 Additional complete lighting head for RLS2000
312307E03 Additional complete lighting head for RLS1000
92881A-001 Support bracket for storage in vehicles
31230501 RLS2000 light head set for RS14 power generator or FOX portable pump
31230701 RLS1000 light head set for RS14 power generator or FOX portable pump

- 312318 LED floodlights**
 With DIN socket 30 mm, 10 m (1.2 in, 32.8 ft) cable with 230 V Schuko plug IP68.
 ■ IP protection class: IP67
 ■ Luminous flux: 6,000 lumen
 ■ Connection values: voltage 100-240 V AC, frequency 50/60 Hz, 42 W
 Dimensions: 261 x 274 x 77 mm (10.3 x 10.8 x 3 in)
 Weight: with cable and plug 3.5 kg (7.7 lb)

22338A-001 Floodlight support for 2 LED floodlights**22338A-002 Floodlight support for 2 LED floodlights**

With sockets, spiral cable and Schuko plug

- 3123052 Upgrade kit SLA to LiFePO4 for RLS1000 and RLS2000**



31230801



312307E25



31230804



31230805



92881A-001



RLS2000 with 4.70 m (15.4 ft) tripod



312318



22338A-002



**HIGH-PERFORMANCE
FANS**

9



Central water spray device



High-performance fans in two sizes: 16" and 22"

HIGH-PERFORMANCE FANS

Protects emergency crews. Saves lives.

Rosenbauer high-performance fans are multi-functional devices that can do much more than just ventilate. Protect buildings or objects with water mist, suppress dangerous gases, and even discharge foam. The fans offer many possibilities – also when extinguishing fires. The quick evacuation of smoke enables easy and rapid access, much better visibility, and reduced temperatures. In short: the risk for the emergency crews can be significantly reduced by using a high-performance fan, and the odds of rescuing people in smoke-filled buildings increases substantially. When used as a first attack device, the fan ensures more safety in operation:

- Better visibility through rapid smoke evacuation
- Smoke control in escape/rescue routes
- Lower temperatures in the object on fire
- Fewer harmful gases and immediate supply of fresh air
- Shorter attack times
- Quicker locating of missing persons
- Less building damage
- Less firefighting water damage

The crucial difference

- All-in-one airflow technology
- Powerful
- Pull-out fan unit
- Largest tilt adjustment, from -20° to $+20^{\circ}$
- Simple operating concept with flexible set-up distance
- High performance fans in two sizes: 16" and 22"
- Modern design
- Can also be used for producing water mist and expansion foam

High-performance fans

All In One Airflow Technology. More power and more volume.

The special design of the fan unit results in an optimised air flow pattern. This is made possible by the special design of the fan impeller, fan control unit and the special aerodynamically shaped grille. The air is delivered into buildings in a targeted way with more pressure, more power and more volume. The result: smoke is evacuated quicker from the object on fire, visibility is immediately better and the temperatures are reduced more quickly.

Ventilate more efficiently with the pull-out fan unit

When unfolding the handle, the fan unit automatically lifts out. In this way, the fan is immediately in the attack position. The nozzle is therefore automatically in an optimised angular position of $+20^\circ$, which makes it easier to get past obstacles in the access area of the building (e.g. stairs, platforms). In combination with the All In One Airflow, the pull-out nozzle also ensures that the air flow reaches the object with maximum efficiency.

Maximum tilt angle from -20° to $+20^\circ$

The fan unit can be adjusted at the press of a button and without any accessories from -20° to $+20^\circ$. Thanks to the maintenance-free gas strut, continuous adjustment is quick and easy, without jamming and skewing – a significant benefit, which contributes to shorter rescue times during an operation. The generous inclination angle ensures more flexibility and efficiency when using the fan. The inclination angle of $+20^\circ$ is very useful for blowing over obstacles. The negative angular position of -20° – larger than any other fan on the market – is ideally suited to ventilate stairs and air shafts.

Flexible installation distance. For easy and safe operation.

The use of a fan protects emergency crews and can save the lives of missing persons. Proper operation is important for successful ventilation. Thanks to the All In One Airflow Technology, all current operating concepts are combined into one, and using it is easier than ever before. The fan can be set up at a flexible distance of 2 steps in front of the access opening. Within this distance, the fan performs reliably without positioning problems. For maximum air flow, an installation distance of 2 m (6 ft) is recommended.

Operation is easier than ever before:

V and E devices

1. Fold handle upwards
2. Fan unit automatically swivels into the attack position of $+20^\circ$
3. Place the fan in front of the access opening (flexible distance of 2 steps)
4. Switch device on – ready

Battery-powered fan

1. Place the fan in front of the access opening (distance of 2 steps)
2. Set inclination angle of the fan unit (-10° to $+20^\circ$)
3. Switch device on – ready

Smallest dimensions

- Smallest fan on the market in the 16" class
- Minimum space needed in the vehicle
- Optimised, easy handling



Fan unit



Pull-out fan unit

Largest tilt adjustment from -20° to $+20^\circ$ 

2 Steps



Minimum space needed in vehicle



Fold-out stabiliser



LED light package

LEDs on the rear of the fan



Light package



Integrated water spray unit



Expansion foam



FANERGY V16



FANERGY V16

Fold-out stabiliser

Cushions against backlash and ensures that the fan is stable and secure in its operating location. The high-performance fan can even be positioned on uneven, sloping or soft terrain by means of the fold-out stabiliser. In addition, more stability is given via the use of the stabiliser in various operating positions when generating a water mist and/or light foam. It absorbs the recoil generated through high water pressure like a balancing support, thus ensuring that the fan has optimum stability at the scene of the emergency. Using the fold-out stabiliser enables easy operation of the fan under unusual conditions, such as placing it on grasslands, sand, gravel or inclined surfaces.

Safer option: LED light package

The LED light package is unique, while ensuring more safety for operations in the dark. The LEDs arranged centrally behind the fan unit illuminate in the direction of the air opening and thus serve as an orientation aid for the SCBA crew. On the rear of the fan, other LEDs ensure good visibility of the operating elements, essential for safe operations. The LED light package is optional for all models.

Water mist and foam use

With regard to operational tactics, two further characteristics of the fan are interesting: water mist as well as expansion foam can be produced. The mobile high-performance fan is equipped with a central water spray unit. This allows compartments, gas cylinders etc. to be cooled and protected. Effective suppression of dangerous flue gases is also possible using the water mist. Turbulence in the air flow is reduced by placing the water spray unit in the centre of the fan nozzle. The handling is much quicker, easier and requires no accessories. The fire hose can be connected directly to the fan via a Storz C-connection, the high-performance fan supplied with water and thus spray mist discharged. With the use of a foam net, the Z2 proportioner and multi-application foam compound, the fan can produce expansion foam in no time. The net is stored in a small compartment directly on the chassis of the fan and can always be carried along in this way.

FANERGY V16

Air outlet diameter:	approx. 16"
Volume flow according to ISO 5801:	5,981 m ³ /h
Static thrust according to ISO 13350:	27.5 N
Fuel:	lead-free gasoline, min. 91 octane
Tank contents:	approx. 3 l (0.8 US gal)
Runtime with 1 tankful:	approx. 110 min. at full load
Dimensions (W x H x D):	545 x 490 x 545 mm (21.5 x 21.5 x 19.3 in)
Weight:	approx. 45 kg (99.2 lb)

Engine: Briggs & Stratton (6.5 hp)

514020	FANERGY V16 with B&S engine
514026	FANERGY V16 with B&S engine, water spray unit and light package

Engine: HONDA GX200 (6.5 hp)

514021	FANERGY V16 with Honda engine
514027	FANERGY V16 with Honda engine, water spray unit and light package

FANERGY E22

Air outlet diameter:	approx. 22"
Volume flow according to ISO 5801:	9,733 m ³ /h
Static thrust according to ISO 13350:	35.8 N
Connection cable:	2 m (6.6 ft) with Schuko plug 230 V/IP68
Protection class:	IP54
Dimensions (W x H x D):	636 x 695 x 490 mm (25 x 27.4 x 19.3 in)
Weight:	approx. 53 kg (116.8 lb)

S = 3.22 kVA
 U = 230 V/1 ~
 I = 14 A
 f = 50/60 Hz

Continuously adjustable (with integrated starting current limiter), for operation with generators or mains operation, digital power indicator with illuminated display.

- 514050** **FANERGY E22 with electric motor**
514053 **FANERGY E22 with electric motor,**
water spray unit and light package

FANERGY E16

Air outlet diameter:	approx. 16"
Volume flow according to ISO 5801:	5,606 m ³ /h
Static thrust according to ISO 13350:	25.8 N
Connection cable:	2 m (6.6 ft) with Schuko plug 230 V/IP68
Protection class:	IP54
Dimensions (W x H x D):	545 x 490 x 545 mm (21.5 x 21.5 x 19.3 in)
Weight:	approx. 51 kg (112.4 lb)

S = 3.45 kVA
 U = 230 V/1 ~
 I = 15 A
 f = 50 Hz

Continuously adjustable (with integrated starting current limiter), for operation with generators or mains operation, digital power indicator with illuminated display.

- 514040** **FANERGY E16 with electric motor**
514043 **FANERGY E16 with electric motor,**
water spray unit and light package

FANERGY E16 COMPACT

Air outlet diameter:	approx. 16"
Volume flow according to ISO 5801:	5,606 m ³ /h
Static thrust according to ISO 13350:	25.8 N
Connection cable:	2.0 m
Protection class:	IP54
Dimensions (W x H x D):	489 x 613 x 448 mm (19.3 x 24.1 x 17.6 lb)
Weight:	approx. 40 kg (88.2 lb)

- 514070** **FANERGY E16 COMPACT with electric motor**
514071 **FANERGY E16 COMPACT with electric motor**
and water spray unit

Small and space-saving frame solution, especially for aerial ladders, platforms and escape stairs.



Unfold the handle, start, done!



With smooth-running transport wheels



Negative adjustment angle of up to -20°



514070



High-performance battery with integrated charging systems, securely locked in the frame

RTE AX B16 OPTIMIZED PERFORMANCE AND RUNNING TIME

RTE AX B16 battery-powered fan

The rechargeable battery of the RTE AX B16 high-performance fan is an extremely efficient and long-lasting energy supplier. A long service life, high running performance, and an intelligent battery management system make the lithium-ion battery of the RTE AX B16 high performance fan one of the most advanced on the market. It combines simple handling and low weight with ergonomic design. The battery management system of the high-quality lithium-ion batteries immediately detects faults and protects the 90 high-performance cells from being overloaded and short-circuited. The rechargeable battery delivers 953 watt hours. This makes it easy, to master every operational situation.

Highlights

- Lithium-ion technology: long service life thanks to modern battery technology. Memory effect and self-discharge are a thing of the past.
- Efficient power pack: the lithium-ion batteries combine high energy density with the smallest dimensions and low weight.
- Easy charging: the lithium-ion batteries can be easily charged directly on the fan without having to remove them. Two charging options are available: an AC power cable or a 24 VDC vehicle charging socket (Magcode).
- Optimal handling: the battery can be changed during operation (in mains operation). The ingenious locking mechanism of the battery in the battery holder ensures a perfect fit and the greatest possible safety, even in difficult operations.
- Increased stability: the position of the lithium-ion batteries ensures a low center of gravity and thus increased stability of the fan.

RTE AX B16

Two operating modes

The RTE AX B16 high-performance fan can be operated by means of a rechargeable battery or the local mains supply. This allows self-sufficient operation at the beginning of the operation when every minute counts, without the firefighter having to worry about the electrical supply. In many situations, the enormous battery life of 60 minutes is enough to get the job done. If an operation takes longer, the RTE AX B16 high-performance fan can be easily connected to a power supply. Uninterrupted operation is thus guaranteed.

BOOST mode for increasing performance

Speed control of the RTE AX B16 is carried out continuously via the central rotary knob of the Rosenbauer control panel from 0 to 100%. If even more power is needed, BOOST mode comes into play. In BOOST mode, the maximum speed is increased. Thus, even the most challenging tasks can be mastered.

Lightweight – 50% lighter compared to non-battery devices

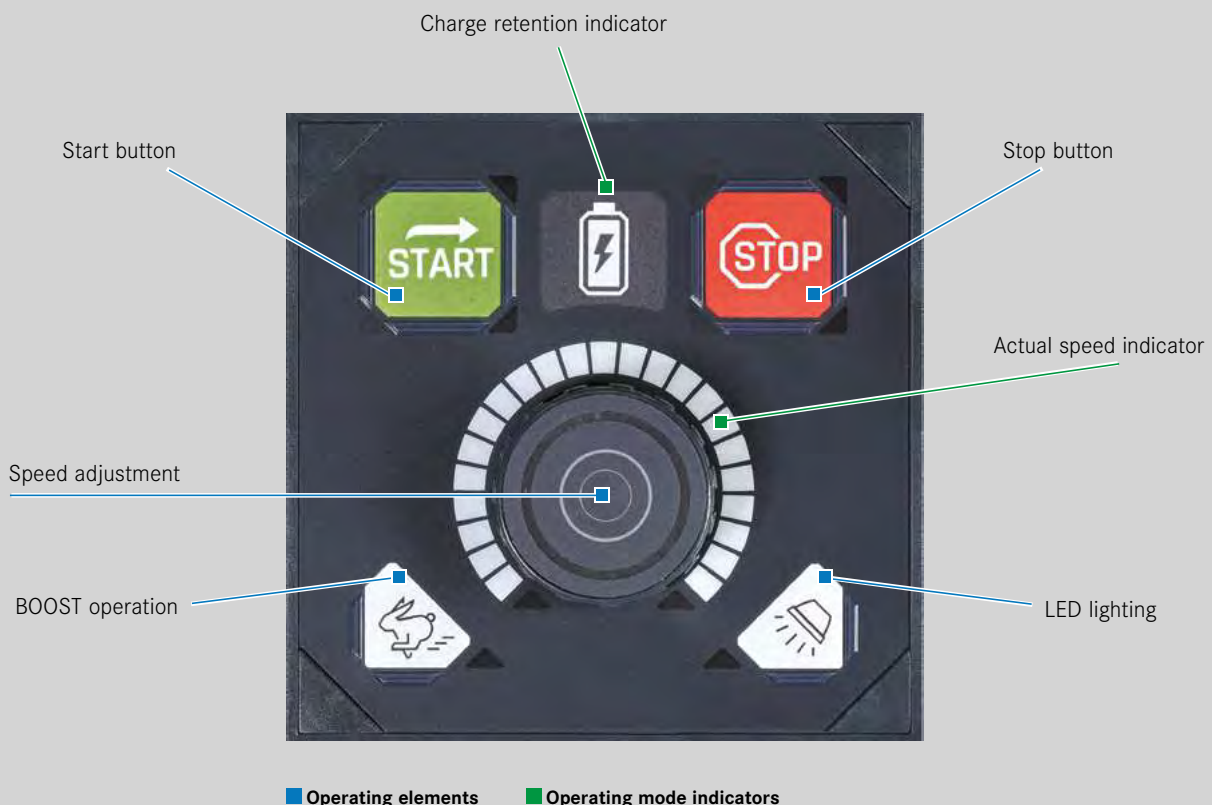
In the development of the RTE AX B16 high-performance fan, the emphasis was on weight reduction and resilience. Which is why the tube frame withstands the strongest loads and also ensures optimal handling due to the multitude of handle positions. Removal from equipment compartments has become very easy. If the scene of the emergency is far away, the RTE AX B16 high performance fan can be quickly pulled to where it is needed using the wheel set and trolley handle, thus saving power.

THE OPERATING CONCEPT OF THE RTE AX B16

It is simple, but with a significantly higher level of information. It is completely new, yet entirely familiar to firefighters. Designed aesthetically in Rosenbauer's style, intuitive, uniform, and thus even simpler operation is now possible, from power generators and ATs to high-performance fans.

Nozzle adjustment lever from -10° to $+20^{\circ}$ 

Fitted with LED light package as standard



Ergonomic aluminum frame
Perfect handling, from carrying in the stairwell to removal from the equipment compartment

Highly efficient drive
New technology for maximum performance in the smallest dimensions

All-in-one fan unit
Unites different fan technologies

Wheel set
Effortless pulling over long distances by 1 person

Tried and tested high-performance battery
Ensures extremely long running time at full speed

Main switch
To safely activate and deactivate the high-performance fan, the main switch must be pressed.

Rosenbauer Operation
Intuitive and simple even in stressful situations

Integrated LED lighting
For increased safety in the dark

Nozzle adjustment from -10° to +20°
Ready for all operations

Flexible charging
24 VDC or 110/230 V - 50/60 Hz

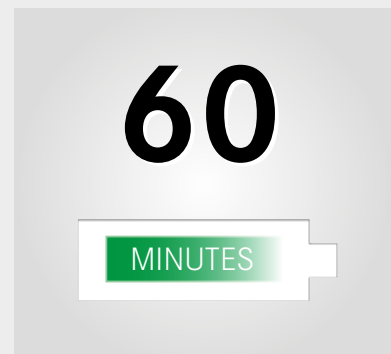
Chock included
For easily holding entryway doors open



Without cable
Can be used anywhere



BOOST mode
For increased power requirement in battery and mains operation



Constant high air flow rate
The 90-cell lithium-ion battery ensures that the air flow rate does not drop.

RTE AX B16

RTE AX B16

Air outlet diameter:	approx. 16"
Volume flow according to ISO 5801:	5,154 m ³ /h
Static thrust according to ISO 13350:	21.6 N
Motor type:	permanent magnet synchronous motor
Motor output:	1,250 watts
Battery design:	changeable via quick-change system Type: lithium-ion battery Rated voltage: 36 V Capacity: 26.1 Ah Weight of the battery: approx 5.5 kg (12.1 lb)
battery operation running time:	60 min. at 100 % without external power supply
Dimensions (W x H x D):	520 x 600 x 355 mm (20.5 x 23.6 x 14 in)
Weight:	approx. 23.5 kg (51.8 lb) or approx. 24.2 kg (53.4 lb) with water spray unit
Connection cable:	1.5 m (4.9 ft), connector type selectable (see order data)
Protection class:	IP54

S = approx. 1.12 kVA
U = 110/230 V/1 ~
I = approx. 5 A
f = 50/60 Hz

514080	High-performance fan RTE AX B16
514081	High-performance fan RTE AX B16 with water spray unit
513090	Power supply connection cable type SCHUKO
513091	Power supply connection cable type NEMA
513092	Power supply connection cable type BRITISH STANDARD
513093	Power supply connection cable type CEE
513094	Power supply connection cable type SWISS
513095	Power supply connection cable type AUSTRALIA

Accessories for RTE AX B16

514086	Spare battery
514087	Wheel set + trolley handle
513088	Carrying strap
514089	External charger
11869A	Voltage converter 12 to 24 V For charging the RTE AX B16 on the 12 V on-board network



514080 / 513090



514086



513088



Water spray unit



Storage compartment for foam net



51191001



512061



513020E08

Options and accessories for high-performance fans

Foam net

For high expansion foam production.
Caution: water spray unit is required!

512026 For high-performance fan 16"

512016 For high-performance fan 22"

703500 Proportioner Z2

With Storz C coupling, for high expansion foam production.

703810 Suction hose

25 mm (1 in)/1.5 m (4.9 ft) for proportioner Z2.

201105 SYNTHETIC SPECIAL pressure hose

5 m (16.4 ft), with Storz C coupling.

705110 Multi-application foam compound, 20 l (4.4 US gal)

PE air tube with belt

For high expansion foam production, 20 m (65.6 ft) roll.

51181501 For high-performance fan 16"

51191001 For high-performance fan 22"

Stable air tube with belt

anti-static, 3 m (9.8 ft), made from plastic.

512061 For high-performance fan 16"

512060 For high-performance fan 22"

075715 Service hour meter and revolution counter

654400 Exhaust gas hose for all "V models"

513020E08 Wedge, loose as a spare part



**ROLLING CONTAINERS
FIREFIGHTING ROBOT**

10



RTE RC PROFILE ROLLING CONTAINERS

RTE RC Profile rolling containers can be individually designed for every need. The footprint corresponds to the standardized EU pallet dimensions of 1.2 x 0.8 m (3.9 x 2.6 ft). However, special dimensions are also possible. All Rosenbauer rolling containers are TÜV-tested in accordance with the currently valid standards.

Stable, robust, and sustainable

The rolling containers are constructed from anodized extruded aluminum profiles, which are joined together using special connecting pieces. These are inserted into the profile pieces and also screwed to them, thereby ensuring exceptional stability and durability: Up to 700 kg (1,543.2 lb) total weight can be transported - on rollers or even in the air using crane eyes.

2 or 4 castors

The rolling containers are optionally available with two rolling and two fixed castors or with four rolling castors. Braking takes place on either two or all four castors. The tread of the wheels is made of particularly resistant polyurethane and ensures that the castors do not wear down.

Powerful brakes for up to 700 kg (1,543.2 lb) of weight

Due to their well thought-out design and high-quality materials, the rolling container models only weigh around 50 kg (110.2 lb) empty. When fully loaded they can weigh up to 700 kg (1,543.2 lb). All rolling containers are equipped with high-quality dead man's brakes as standard: If the grab rail is released, the container comes to a standstill quickly and by itself. The braking system with stainless steel cone brake or drum brake is situated within the structural dimensions and makes maneuvering easy as no parts protrude. From total weights of 450 kg (992 lb), four braked castors are required.



Beveled profiles

The extruded profiles of all RTE RC Profile rolling containers are provided with a clear chamfer. There are no longer any external 90° edges, making maneuvering in the tightest of spaces (e.g., in the vehicle) much easier.

One-bar operation

To set a rolling container in motion, the orange handle bar is pushed down. Due to the low resistance, this works with minimal effort and - thanks to the single-bar mechanism - without the need to spread your fingers. If the handle bar is released, it automatically folds up, disappears into the body, and the RTE RC Profile comes to a standstill.

LED lighting for optimal visibility

Rolling containers can be equipped with LED lighting on request. The lighting units are integrated in the profiles and, thanks to diffusers, ensure glare-free lighting. The energy-saving LED strips are operated using a replaceable battery.

Firmly secured in the vehicle

Each RTE RC Profile can be secured quickly and conveniently using a rail installed in the vehicle. This ensures that the mobile containers and their equipment always remain where they were parked and - thanks to a special locking device - cannot tip over, even if the vehicle has only been partially loaded and the journey involves extreme transverse and longitudinal forces.

The RTE RC Profile is optionally available with:

- Shelves, cover plate, or lattice walls made of aluminum
- Forklift runners
- Lifting eyes
- Drawbar eye for loading a cable winch
- Locking device for steering the castors directly forward
- LED lighting
- Cover caps for corner connectors





73000A-xxx



73000A-xxx
with mounted accessories



73010A-xxx

73000A-xxx RTE RC Profile "Frame"

Empty weight: 50 kg (110.2 lb)

Live load: 400 kg (881.8 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H): 1,200 x 800 x 1,150 mm
(47.2 x 31.5 x 45.3 in) (other sizes on request)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Shelves
- Cover plate
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors
- Protective cover with zip closure

94405A-002 Frame assembly set

1,200 x 800 x 1,150 (47.2 x 31.5 x 45.3 in), cone brake

94405A-005 Frame assembly set

1,200 x 800 x 1,450 (47.2 x 31.5 x 57 in), cone brake

94406A-002 Frame assembly set

1,200 x 800 x 1,150 (47.2 x 31.5 x 45.3 in), drum brake

94406A-005 Frame assembly set

1,200 x 800 x 1,450 (47.2 x 31.5 x 57 in), drum brake

73010A-xxx RTE RC Profile "Plateau"

Empty weight: 43 kg (94.8 lb)

Live load: 407 kg (897.3 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H): 1,200 x 800 x 1,150 mm
(47.2 x 31.5 x 45.3 in)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors

RTE RC Profile "Mesh box"

Empty weight: 75 kg (165.3 lb)

Live load: 375 kg (826.7 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H): 1,200 x 800 x 1,150 mm (47.2 x 31.5 x 45.3 in)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front
- Fixed grille side walls

Options:

- Dead man's brake system, drum brakes
- Folding grille walls left and/or right
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors
- Protective cover with zip closure

73022A-001 RTE RC Profile „Mesh box“ with folding wall on the left

Double cone brakes, double steering

73022A-007 RTE RC Profile „Mesh box“ with foding wall on the left

Double drum brakes, double steering



73022A-001 / 73022A-007

RTE RC Profile "Suction point 1600"

Empty weight: 110 kg (242.5 lb)

Live load: 340 kg (749.6 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H):

1,600 x 800 x 1,150 mm (63 x 31.5 x 45.3 in) (unloaded)

1,600 x 800 x 1,400 mm (63 x 31.5 x 55.1 in) (loaded)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front
- COMFORT brackets for loading (load not included)

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors

73021A-001 RTE RC Profile "Suction point 1600"

Double cone brakes, double steering

73021A-005 RTE RC Profile "Suction point 1600"

Double drum brakes, double steering



73021A-001 / 73021A-005



Loading "Suction point 1600"



73023A-005 / 73023A-013

Ergonomic holders for additional loading

Item no.	pcs.	Identification
	1	Portable pump
651103	1	Fuel canister 20 l (5.3 US gal), red
651300	1	Filler neck with flexible hose
210050	4	Suction hose 110 mm (4.3 in), 1.5 m (4.9 ft) Storz A
149010	2	Suction hose/valve line with bag
260200	1	Suction strainer with check valve, Storz A
275640	1	Wire guard, Storz A
275505	3	Coupling spanner ABC, LM
269600	1	Overground hydrant key
259100	1	Collecting piece, Storz A-B/B
256100	1	Adapter, Storz B-C
256200	1	Adapter, Storz A-B
271500	1	Standpipe 2B, with shut-off
269700	1	Underground hydrant key
200825	1	Pressure hose yellow 5 m (16.4 ft) Storz B
266100	1	Pressure relief valve Storz B

RTE RC Profile "Suction point 1200"

Empty weight: 75 kg (165.3 lb)

Live load: 375 kg (826.7 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H):

1,200 x 800 x 1,150 mm (47.2 x 31.5 x 45.3 in) (unloaded)

1,200 x 800 x 1,900 mm (47.2 x 31.5 x 74.8 in) (loaded)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front
- COMFORT brackets for loading (load not included)

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors (can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors

73023A-005 RTE RC Profile "Suction point 1200"

Double cone brakes, double steering

73023A-013 RTE RC Profile "Suction point 1200"

Double drum brakes, double steering

Ergonomic holders for additional loading

Item no.	pcs.	Identification
	1	Portable pump
651103	1	Fuel canister 20 l (5.3 US gal), red
651300	1	Filler neck with flexible hose
210050	4	Suction hose 110 mm (4.3 in), 1.5 m (4.9 ft) Storz A
149010	2	Suction hose/valve line with bag
260200	1	Suction strainer with check valve, Storz A
275640	1	Wire guard, Storz A
275505	3	Coupling spanner ABC, LM
269600	1	Overground hydrant key
259100	1	Collecting piece, Storz A-B/B
256200	1	Adapter, Storz A-B
200825	1	Pressure hose yellow 5 m (16.4 ft), Storz B
266100	1	Pressure relief valve Storz B

RTE RC Profile "Blitz attack"

Empty weight: 115 kg (253.5 lb)

Live load: 335 kg (738.5 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H):

1,200 x 800 x 1,450 mm (47.2 x 31.5 x 57.1 in) (unloaded)

1,200 x 800 x 1,600 mm (47.2 x 31.5 x 63 in) (loaded)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front
- COMFORT brackets for loading (load not included)

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors
- Protective cover with zip closure

86860A-002 RTE RC Profile "Blitz attack"

Double cone brakes, double steering

86860A-001 RTE RC Profile "Blitz attack"

Double drum brakes, double steering



86860A-002 / 86860A-001



73024A-001 / 73024A-002

Ergonomic holders for additional loading

Item no.	pcs.	Identification
282670	1	Powder extinguisher ABC 6 kg (13.2 lb)
200830	10	Pressure hose yellow 20 m (65.6 ft), Storz B
200810	6	Pressure hose yellow 15 m (49.2 ft), Storz C
295200	2	Hose band C
295300	2	Hose band B
295400	1	Bag for hose band set
292400	2	Hose holder
292701	1	Hose bridges (pair)
279540	2	Nozzle C
263100	1	Combination spray nozzle B with multi-purpose branchpipe
267900	1	Support bend B
256100	4	Adapter, Storz B-C
257000	1	Distributor B-CBC
256200	1	Adapter, Storz A-B

RTE RC Profile "Hose"

Empty weight: 115 kg (253.5 lb)

Live load: 335 kg (738.5 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H): 1,200 x 800 x 1,350 mm
(47.2 x 31.5 x 53.1 in)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front
- COMFORT brackets for loading (load not included)

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors
- Protective cover with zip closure

73024A-001 RTE RC Profile "Hose", double cone brakes,
double steering

73024A-002 RTE RC Profile "Hose", double drum brakes,
double steering

Ergonomic holders for additional loading

Item no.	pcs.	Identification
201220	24	Pressure hose 20 m (65.6 ft), Storz B or
200830	24	Pressure hose yellow 20 m (65.6 ft), Storz B

RTE RC Profile "Water damage"

Empty weight: 105 kg (231.5 lb)
 Live load: 345 kg (760.6 lb)
 Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors
 Dimensions (L x W x H):
 1,200 x 800 x 1,350 mm (47.2 x 31.5 x 53.1 in) (unloaded)
 1,200 x 800 x 1,800 mm (47.2 x 31.5 x 70.9 in) (loaded)

Standard scope of delivery:

- Dead man's brake system, conical brake
- 2 x swivel castors offset on the handle side
- 2 x fixed castors in front
- COMFORT brackets for loading (load not included)

Options:

- Dead man's brake system, drum brakes
- Straight-line brake for castors
(can be operated centrally from the handle side)
- Forklift runners
- Lifting eyes
- Drawbar eye
- LED lighting (floor area and equipment compartment)
- Design cover caps for corner connectors
- Protective cover with zip closure

8686 1A-004 RTE RC Profile "Water damage"

Double cone brakes, double steering

8686 1A-001 RTE RC Profile "Water damage"

Double drum brakes, double steering

Ergonomic holders for additional loading

Item no.	pcs.	Identification
923809	1	Nilfisk "ALTO-ATTIX 751-71" water suction device with feed pump including holder for accessories (suction hose, hand tube, floor nozzle)
52470A-001	2	NAUTILUS 8/1 submersible pump
200830	4	Pressure hose yellow 20 m (65.6 ft) Storz B
200810	2	Pressure hose yellow 15 m (49.2 ft) Storz C
268120	2	Shut-off device
268020	2	Elbow 90° Storz B (quantity depends on the number of SP)
275505	2	Coupling spanner ABC, LM
151714	2	Working line (quantity depends on the number of SP)
151021	2	Carrying bag navy blue for working line
910997	2	Rubber slider
911141	1	Piassava fiber broom with scraper
910010	1	Upturned spade
292200	2	Rope hose holder
275770	1	Hose anti-kink elbow
268035	2	Outlet pipe Storz B (quantity depends on the number of SP)
933008	2	PRCD-S safety switch (quantity depends on the number of SP)
143220	1-2 pairs	Rubber boots
143620	1	Waders



86861A-004 / 86861A-001



86861A-004 / 86861A-001



84118A-xxx



84118A-xxx



15500B-001



15500B-001

84118A-xxx RTE RC Profile "SCBA cylinder"

Tare weight: 110 kg (198.4 lb)

Payload: 360 kg (793.7 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors,

Dimensions (L x W x H): 1,200 x 800 x 1,150 mm

(47.2 x 31.5 x 45.3 in)

Standard scope of delivery:

- Dead man's brake system, cone brake
- 2 x swivel castors, staggered on the handle side
- 2 x fixed castors, front

Choice of options:

- Dead man's brake system, drum brake
- Locking device to keep swivel castors running in a straight line
- Forklift skids
- Towing eyes
- LED lighting (ground level and equipment room)
- Design corner connector caps
- Distance keeper for 4 l (1.1 US gal) cylinders
- Storage 15 pcs. 9 l (2.4 US gal) cylinders

Ergonomic brackets for the following loads

pcs.	Identification
24	Cylinder 4 l/200 bar (1.1 US gal/2,902.8 psi) or
24	Cylinder 6 l/300 bar (1.6 US gal/4,354.1 psi) or
24	Cylinder Composite 6.8 l/300 bar (1.8 US gal/4,354.1 psi)

15500B-001 RTE RC Profile "Hygiene Stage 1"

Tare weight: 155 kg (341.7 lb)

Payload: 295 kg (650.4 lb)

Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors

Dimensions (L x W x H): 1,200 x 800 x 1,350 mm

(47.2 x 31.5 x 70.9 in)

Standard scope of delivery:

- Dead man's brake system, cone brake
- 2 x swivel castors, staggered on the handle side
- 2 x fixed castors, front
- COMFORT brackets for loading (load not included)

Choice of options:

- Dead man's brake system, drum brake
- Locking device to keep swivel castors running in a straight line
- Forklift skids
- Towing eyes
- LED lighting (ground level and equipment room)
- Design corner connector caps
- Compressed air with air cylinder

Ergonomic brackets for the following loads

pcs.	Identification
1	GEKA ½" hose reel coupling (40 mm (1.6 in)) fresh water income
1	GEKA ½" hose reel coupling (40 mm (1.6 in)) fresh water outcome
1	GEKA 1" hose reel coupling (40 mm (1.6 in)) waste water
1	5 m (16.4 ft) waste water hose 1" GEKA hose reel coupling (40 mm (1.6 in))
1	Bracket for garbage bag
1	Mirror plate 300 x 300 mm (11.8 x 11.8 in)
2	Soap dispenser 500 ml (0.1 US gal)
1	Towel dispenser
1	Storage box B (H x W x L): 220 x 400 x 800 mm (8.7 x 15.7 x 31.5 in)
2	Storage box B (H x W x L): 220 x 400 x 400 mm (8.7 x 15.7 x 15.7 in)
1	Storage box B (H x W x L): 117 x 400 x 200 mm (4.6 x 15.7 x 7.9 in)
1	Storage box B (H x W x L): 117 x 400 x 800 mm (4.6 x 15.7 x 31.5 in)

15500B-001 RTE RC Profile "Hygiene Stage 2"

Tare weight: 160 kg (352.7 lb)
 Payload: 290 kg (693.3 lb)
 Floor height: 280 mm (11 in) with 200 mm (7.9 in) castors
 Dimensions (L x W x H): 1,200 x 800 x 1,350 mm (47.2 x 31.5 x 70.9 in)

Standard scope of delivery:

- Dead man's brake system, cone brake
- 2 x swivel castors, staggered on the handle side
- 2 x fixed castors, front
- COMFORT brackets for loading (load not included)

Choice of options:

- Dead man's brake system, drum brake
- Locking device to keep swivel castors running in a straight line
- Forklift skids
- Towing eyes
- LED lighting (ground level and equipment room)
- Design corner connector caps
- Compressed air with air cylinder



15500B-001



15500B-001



94407A-001



94408A-001



94409A-001



94410A-001



94411A-001

Ergonomic brackets for the following loads

pcs.	Identification
1	GEKA ½" hose reel coupling (40 mm (1.6 in)) fresh water income
1	GEKA ½" hose reel coupling (40 mm (1.6 in)) fresh water outcome
1	GEKA 1" hose reel coupling (40 mm (1.6 in)) waste water
1	5 m (16.4 ft) waste water hose 1" GEKA hose reel coupling (40 mm (1.6 in))
1	Bracket for garbage bag
1	Mirror plate 300 x 300 mm (11.8 x 11.8 in)
2	Soap dispenser 500 ml (0.1 US gal)
1	Towel dispenser
1	Storage box B (H x W x L): 220 x 400 x 800 mm (8.7 x 15.7 x 31.5 in)
2	2 Storage box B (H x W x L): 220 x 400 x 400 mm (8.7 x 15.7 x 15.7 in)
1	1 Storage box B (H x W x L): 117 x 400 x 200 mm (4.6 x 15.7 x 7.9 in)
1	Storage for box B (H x W x L): 117 x 400 x 800 mm (4.6 x 15.7 x 31.5 in)
1	Fresh water trolley 23 l (6.1 US gal)
1	Waste water trolley 23 l (6.1 US gal)
1	Manual water pump

Accessories for the RTE RC Profile

94407A-001 Shelf kit

1,200 x 800 (47.2 x 31.5 in), made of aluminum

94408A-001 Cover plate kit

1,200 x 800 (47.2 x 31.5 in), made of aluminum

94409A-001 Forklift kit, made of stainless steel sheet

94410A-001 Crane eye kit, made of stainless steel sheet

94411A-001 Drawbar eye kit, made of stainless steel sheet

02812B-xxx Protective cover with zip closure



FIREFIGHTING ROBOT RTE ROBOT

Flexible design. Unimagined possibilities.

Innovative technologies offer the opportunity to take firefighting to a new level - and with safety a top priority. Because the use of a remote-controlled robot allows operations to be carried out with a small team and a significantly reduced operational risk for the personnel. Especially when it can be used in an unlimited number of ways.

A unique electric payload exchange system for the chassis makes this variety possible. With so-called payload modules, it is possible to react quickly to a wide variety of operational requirements: everything is possible, from extinguishing, through support for difficult logistics tasks, to recovery work. The robot and payload are controlled simply and intuitively via a radio remote control.

In order to be able to guarantee readiness at all times, the dimensions were chosen so that the RTE Robot can be accommodated in any logistics vehicle that can also transport a Euro pallet.

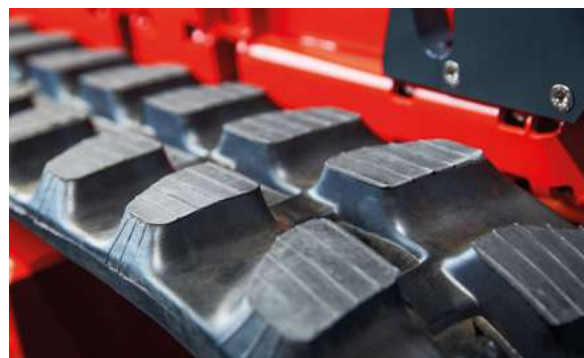
In order to always have an overview of what is happening around the robot, there are various options for image transmission.

Impressive concept

The robust front protects the waterproof central unit from damage. The optimized shape makes it easier to drive over obstacles. and with the fixed integrated shackle at the front and rear, the RTE Robot can also be used for recovery work.



Radio remote control for robots and turrets



Chains for high traction



Robust front with towing shackle



Charging plug



PC811
RTE Robot Chassis 800



PC811
RTE Robot Chassis 1070



PC81A
Add-on module 800 x 1,200 mm with chassis

Quickly ready for operation

The charging socket for charging the batteries is located at the rear. After only roughly 4 hours of charging, the RTE Robot is fully operational again.

Safe in deployment

Thanks to the integrated driving and blue lights, the RTE Robot is safe on the road at all times, day or night. In order to be easily noticed at the scene of the emergency, it is equipped with an acoustic warning signal as standard.

Easy to control

The compact radio remote control fits comfortably in your hand and is easy to use. In addition to the robot itself, it can also be used to control functions of the payload, such as the water cannon.

RTE ROBOT – BASIC VEHICLE

Technical data	
Dimensions:	Length: 1,200 mm (47.2 in) Width: 800 mm (31.5 in) Height: approx. 360 mm (14.2 in)
Weight:	approx. 375 kg (825 lb) for basic version
Total weight:	1,000 kg (2,200 lb)
Chassis:	Tracked vehicle with 150 mm (5.9 in) track width, underaxle clearance: approx. 80 mm (3.2 in)
Drive motors:	2 x 48 V electric motors
Batteries:	4 x 12 V AGM batteries, 80 Ah per battery
Radio remote control:	Industrial radio remote control, range: > 200 m (650 ft)
Protection class:	IP67
Speed	5 km/h (3.1 mph)
Obstacle clearance:	> 20 cm (7.9 in)
Slope clearance:	> 70% (35°) - depending on total weight, center of gravity and surface
Static side-slope:	> 58% (30°) - depending on total weight, center of gravity and surface

PC811 RTE Robot Chassis

- Robot Chassis with 800 mm (31.5 in) width (PC811 - Chassis 800)
- Robot chassis with 1,070 mm (42.1 in) width (PC811 - Chassis 1070)
 - Integrated possibility of rolling container transport (PC811 - Chassis 1070 with RC)

PC81A add-on module 1,200 x 800 mm (47.2 x 31.5 in)

Standard module for implementing customer-specific solutions

RTE ROBOT – RM15 PAYLOAD MODULE

The RM15 turret payload module makes the RTE Robot an efficient fire-fighting unit. The Rosenbauer RM15 turret enables flow rates between 100 (26.4 US gpm) and 2,000 l/min (528 US gpm) with throw distances of up to 65 m (210 ft). The turret is protected against the effects of heat by a covering made of stainless steel; in addition, a self-protection nozzle wets the entire module with extinguishing agent. With three different variants, it can be perfectly adapted to the operational control requirements.

PC81G payload module RM15 short – standard version

PC81G payload module RM15 long

PC81G payload module RM15 high and fan RTE AX B16

Separate add-on module for transporting the RTE AX B16 fan. The fan can be controlled remotely using the T5 radio remote control.

Technical data - standard version	
Dimensions:	<ul style="list-style-type: none"> ▪ Length: 549 mm (21.6 in) (with Storz B coupling, without blank caps) ▪ Width: 800 mm (31.5 in) ▪ Module height: 550 mm (21.7 in) ▪ Total height (mounted on the robot): 852 mm (33.5 in)
Weight:	approx. 70 kg (154 lb)
Water monitor:	<ul style="list-style-type: none"> ▪ Type: Rosenbauer RM15C ▪ Flow range: 100 l/min (26.5 US gpm) to 2,000 l/min (528 US gpm) at 10 bar at the turret flange ▪ Self-protection device: 1 self-protection nozzle
Turret piping:	<ul style="list-style-type: none"> ▪ Pipe 2½" ext. thread(e.g., Storz B) ▪ Electric valve to control water delivery, controlled by radio remote control
Equipment:	<ul style="list-style-type: none"> ▪ 2 high-performance LED headlights, switchable via remote control, 4,000 lm each ▪ Tray for transporting small items
Required radio remote control:	<ul style="list-style-type: none"> ▪ Corresponding to Code CC81X-FB02 or higher ▪ CANNOT be combined with CC81X-FB01!



RTE Robot with RM15 turret



PC81G payload module RM15 high and fan RTE AX B16



PC81G payload module RM15 short



RTE Robot with RM35 turret

PAYLOAD MODULE RM35 - RTE ROBOT

The RM35 turret payload module turns the RTE Robot into a high-performance firefighting unit. The Rosenbauer RM35 turret enables flow rates of up to 3,500 l/min (925 US gpm) with throw distances of 80 m (262 ft). The turret is protected against the effects of heat by a covering hood made of aluminum; in addition, a self-protection nozzle wets the entire superstructure module with extinguishing agent. An additional pressure outlet enables emergency crews to carry out post-extinguishing work directly from the robot using a nozzle.

PC 81J Add-on module RM35

Technical data	
Dimensions:	<ul style="list-style-type: none"> ▪ Length: 1,200 mm (47.2 in) (with Storz A coupling, without blank caps) ▪ Width: 800 mm (31.5 in) ▪ Module height: 560 mm (22.1 in) ▪ Total height (mounted on the robot): 848 mm (33.4 in)
Weight:	approx. 100 kg (220 lb)
Water monitor:	<ul style="list-style-type: none"> ▪ Type: Rosenbauer RM35C ▪ Flow range: 1,500 l/min (400 US gpm) to 3,500 l/min (925 US gpm) at 10 bar at the turret flange ▪ Headlight: 1 LED headlight ▪ Self-protection device: 1 self-protection nozzle
Turret piping:	<ul style="list-style-type: none"> ▪ Pipes 4 1/2" ext. thread (e.g., Storz A110) ▪ Electric valve to control water delivery, controlled by radio remote control ▪ Additional pressure outlet 2" (e.g., Storz C) with manual ball valve
Bracket:	For 2B-A or 3B-A collector

RTE ROBOT – ROLLING CONTAINER TRANSPORT PAYLOAD MODULE

With the rolling container transport live load module, the RTE Robot makes rolling containers mobile and thereby improves deployment flexibility enormously. The multi-part platform is attached to the standard anchors on the robot without tools. A pair of access ramps is used to drive the rolling containers onto the live load module. The live load module is suitable for a wide variety of wheel configurations on the rolling container, such as two swivel and two fixed castors as well as four swivel castors.

Technical data

Dimensions:	<ul style="list-style-type: none"> Length: 1,158 mm (45.6 in) Width: 750 mm (29.5 in) Total height (mounted on robot): 420 mm (16.56 in), platform height 370 mm (14.6 in) <p>A rolling container with standard dimensions of 1,200 mm x 800 mm (47.2 x 31.5 in) is attached to the payload module in such a way that the combination of robot and rolling container does not exceed the pallet dimensions of 1,200 mm x 800 mm (47.2 x 31.5 in). This means that - if there is enough height in the vehicle - each rolling container bay can also be used for a rolling container on an RTE Robot!</p>
Weight:	<ul style="list-style-type: none"> approx. 59 kg (130 lb) (payload module) approx. 11 kg (24 lb) (ramp 1,150 mm (31.5 in))
Scope of delivery:	<ul style="list-style-type: none"> Rolling container rails - right and left Middle part with centering elements
Access ramps (can be ordered optionally):	With 1,150 mm (45.3 in) long access ramps, the ramp angle is 19° (34%). This enables two people to push a rolling container weighing up to 300 kg (660 lb) onto the add-on module without mechanical aids.
Rolling container fixing elements:	<ul style="list-style-type: none"> The new generation of Rosenbauer rolling containers (RTE RC Profile) can be connected directly to the add-on module using four clamping elements. Alternatively, e.g., four tension belts can be used to attach the rolling container to the add-on module.
Rolling container compatibility:	<ul style="list-style-type: none"> Mobile containers with dimensions of 1,200 mm x 800 mm (47.2 x 31.5 in) can generally be transported. The rollers can have either an offset or the same track width. If the track width and center distance of the rollers on the rolling container are stated, a compatibility check can be carried out in advance!

PC81B Additional module for rolling container

The combination of the RTE Robot 1070 and the suction point mobile container makes it possible to transport all the necessary equipment for a suction point, including a portable fire pump, in a Rosenbauer AT with a tail lift. The intermediate module is used to facilitate entry into the vehicle's tunnel at the rear.

PC81C Rolling container transport module

Using ramps, standard RTE RC Profile rolling containers are pushed onto the RTE Robot and secured four ways. This means that mobile containers weighing up to 450 kg (992.1 lb) can be safely and quickly transported in off-road environments.



PC81C
Rolling container high



PC81B
Additional module for rolling container



PC81C
Rolling container transport module



**DIGITAL
SOLUTIONS**

11



ROSENBAUER RDS CONNECTED - DIGITAL SOLUTIONS FOR FIRE SERVICES

Modern vehicles are inconceivable without software. At Rosenbauer, digital solutions also help during operation, preparation and debriefing, as well as with monitoring and maintaining the vehicle and equipment fleet.

The RDS Connected portfolio has been specifically developed for the tasks of the fire service and emergency crews and, in conjunction with our vehicles and equipment, supports their daily work. These digital solutions also include video drones as well as command tablets, which help to keep track of what is happening at all times and in all places.

RDS CONNECTED AT A GLANCE

RDS Connected Fleet

Comprehensive fleet and equipment management



RDS Connected Command

Operational management system - from call to debriefing



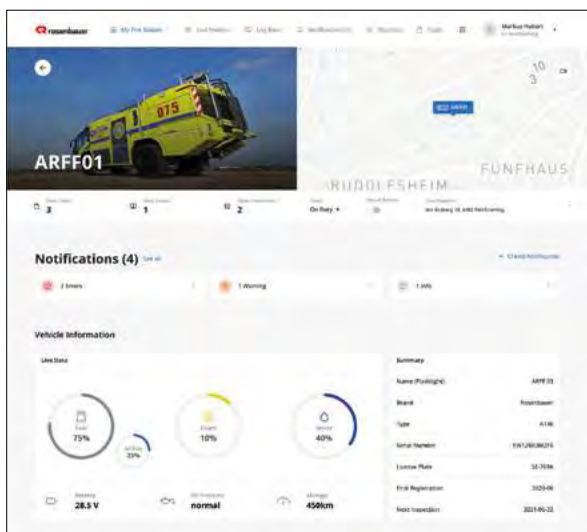
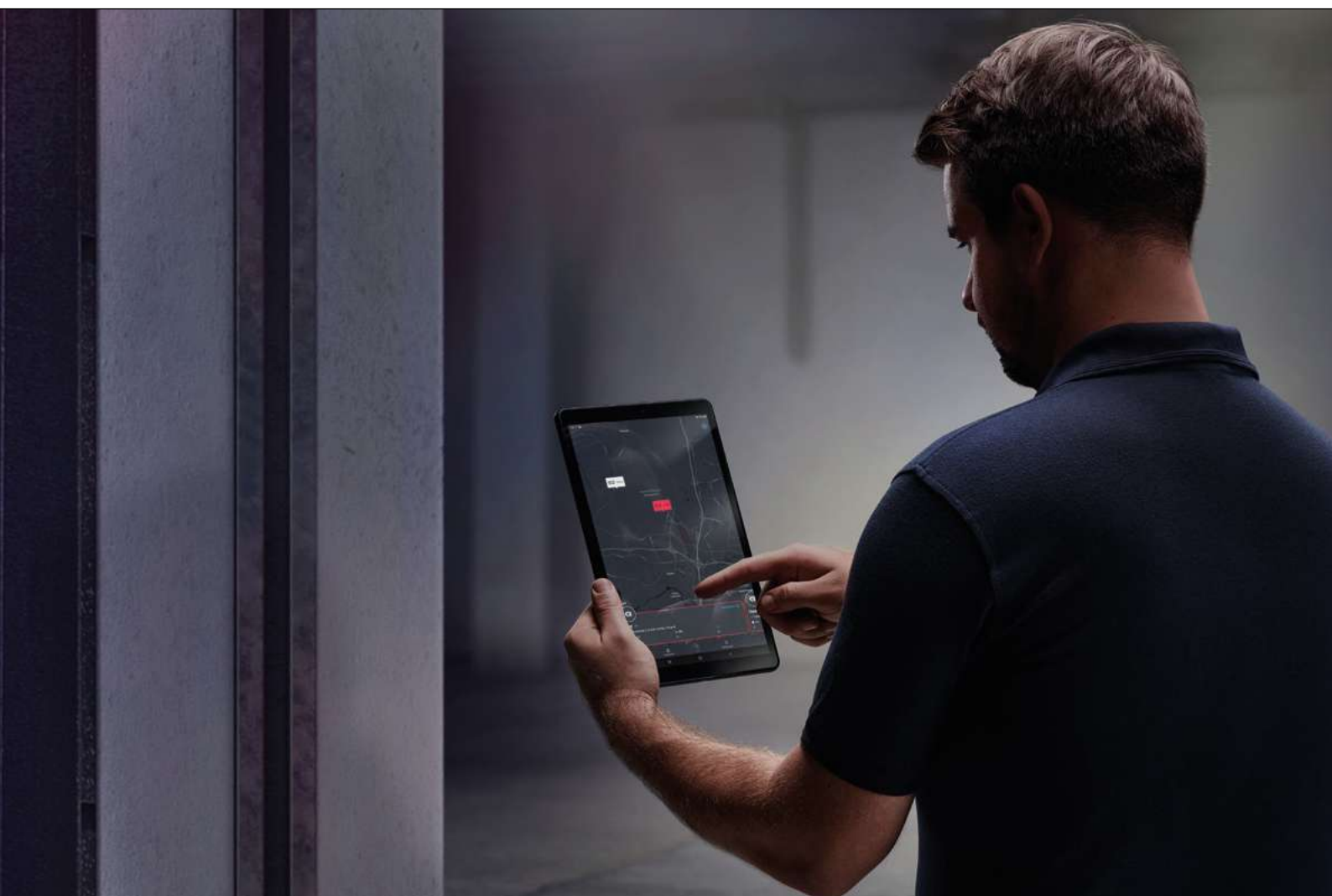
RDS Connected Equipment

Telematics modules and trackers in vehicles, operational tablets and brackets



RDS Connected Drones

Visual support during drone deployments (e.g., with thermal imaging cameras)



RDS CONNECTED FLEET

Which vehicles are ready for operation, and where are they? How much operating and extinguishing agent such as fuel, water, foam, etc. is on board? Which maintenance tasks have already been completed? RDS Connected Fleet provides answers to these questions and is therefore the starting point for the digital fire station. Day-to-day tasks are simplified and clearly presented.

RDS Connected Fleet not only provides real-time information on the status of the operational fleet, but also logs vehicle-related data, including error messages for post-operational work. Fire services thus have a complete overview of their vehicle fleet and the associated equipment - live and always available.

EVERYTHING IN SIGHT

RDS Connected Fleet provides an overview of the status of all vehicles and components, including a live display of the operating resources. Thanks to intelligent message management, notifications are ranked according to urgency.

Dashboard

With the dashboard, which is perfectly tailored to the needs of emergency services, you not only have an overview of the entire fleet, but also all important details and signals at the push of a button.

Driver's logbook

RDS Connected Fleet automatically documents all journeys and incidents that occur during the trip. And a warning is issued if a trip wasn't recorded.

Geofencing and live display

RDS Connected Fleet gives a real-time overview of where all the vehicles in the fleet are located. This makes it clear at a glance which vehicle is closest to the scene or whether it is outside its required zone.

Simple self-management

In order to simplify the organization of work on vehicles and equipment, access to RDS Connected Fleet can be assigned individually to individual team members. A well thought-out access rights system shows you everything you need to know - and nothing else.

Checklists

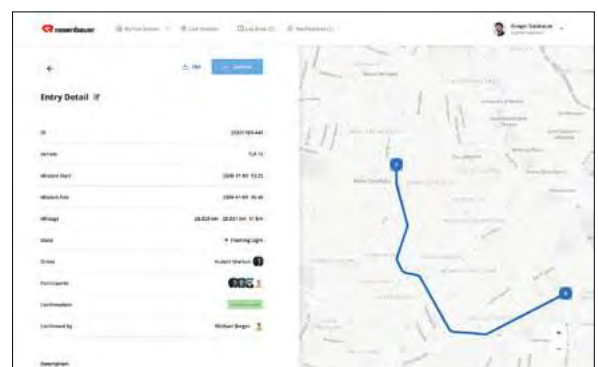
Simplifying and digitizing standard processes is for future-proof emergency response organizations. RDS Connected Fleet allows you to create your own checklists, e.g. daily shift handovers, weekly fire extinguisher assessments or annual visual inspections. It reminds and warns when tasks are not processed or checks are negative.

Task management

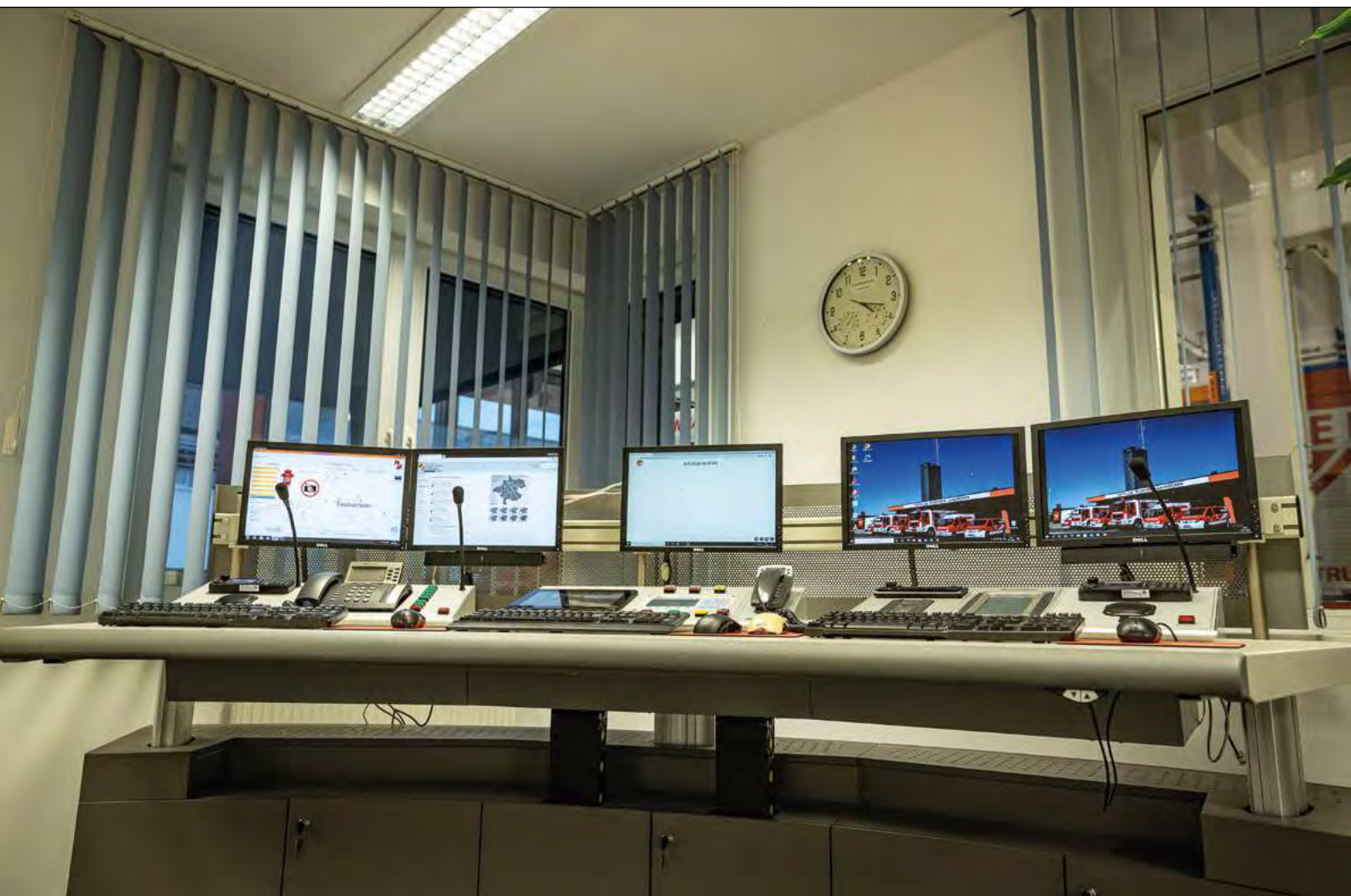
With a well thought-out internal ticketing system, RDS Connected Fleet supports structured work, the simple reporting of incidents, and the delegation of tasks to those responsible. The most important information and statuses are available at a glance, and the fleet is always ready for operation. No more chalkboards, to-do lists, or messenger notifications.



Date	Time	Status	Task
2023-03-10 12:00	12:00	Completed	Task 1
2023-03-10 12:30	12:30	In Progress	Task 2
2023-03-10 13:00	13:00	Completed	Task 3
2023-03-10 13:30	13:30	In Progress	Task 4
2023-03-10 14:00	14:00	Completed	Task 5
2023-03-10 14:30	14:30	In Progress	Task 6
2023-03-10 15:00	15:00	Completed	Task 7
2023-03-10 15:30	15:30	In Progress	Task 8
2023-03-10 16:00	16:00	Completed	Task 9
2023-03-10 16:30	16:30	In Progress	Task 10
2023-03-10 17:00	17:00	Completed	Task 11
2023-03-10 17:30	17:30	In Progress	Task 12



Screenshot on a tablet or desktop



A fire protection plan in RDS Connected Command

RDS CONNECTED COMMAND

Operations management system

With Rosenbauer's RDS Connected Command solutions, all relevant information is directly available at the scene of the emergency - from the visualization of the alert data and navigation to the site through to the provision of decision-critical information (fire protection plans, hazardous substance data, checklists, and vehicle rescue cards). All this data can be shared with other emergency crews in real time. The result is a uniform command and situational overview for all crews involved, right up to the command center. The digital solutions are modular and can be used by all fire services and emergency response organizations.

Operational preparation

RDS Connected Command is the central hub for the handling and provision of all operation-relevant information such as water supply points, building data/plans, data sheets, checklists, standard deployment rules, etc. The data is stored within a centralized DataCenter and is thus always available in secure form. They are synchronized live on end devices, and are then also available offline. This means that all information is always up to date at the scene.

DISPATCHING AND ALERTING

RDS Connected Command incorporates a unified solution for dispatching and alerting emergency response organizations. The system can be used in the classic stationary environment of an operational command center, and also in a mobile emergency unit or directly on scene. Automatic alert data transfer for alerts to the RDS Connected App, the operational leader's tablet and the alert monitor.

- Acceptance of operation, registration, and deployment
- Map display of streets and orthophotos
- Reports and documentation for operational post-processing
- Scheduling checklists and operations logbook

The most important operational information on a smartphone

The RDS Connected Command app supports crews with their day-to-day activities. The all-round solution is an ideal introduction to the RDS Connected Command products.

- Operational information and alert data is always to hand
- Locational data of the emergency services via GPS tracking function
- Navigation: Automatic address transfer to the operational navigation
- Operations messenger: Send and receive text and voice messages, as well as videos, images, and other content such as fire protection plans, data sheets, etc.
- Alert and visualize the available manpower via the alarm monitor - learn who is deployed and when
- Depiction of hydrants, buildings and symbols across different map layers
- Contacts: All application-relevant contact data centralized and available on a smartphone

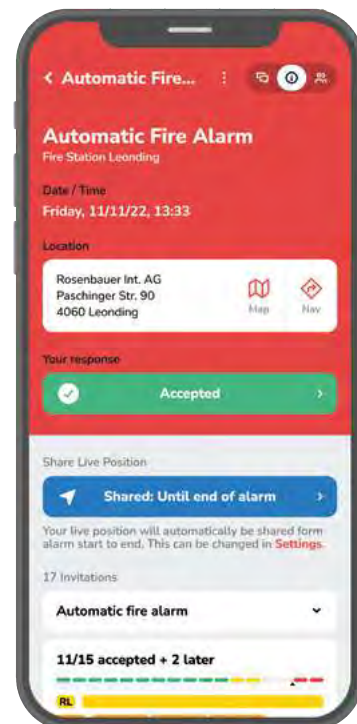
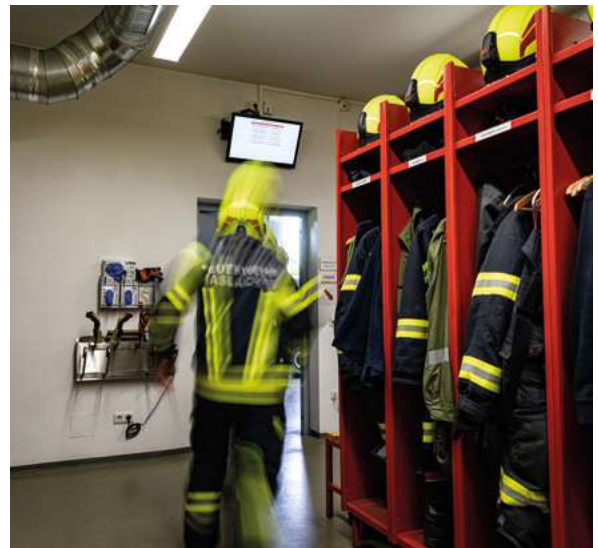
Overview of current operational data

The RDS Connected Command Alarm Monitor provides an overview of the alert as soon as it arrives at the firehouse. The visualization of the initial information can be customized and adapted to the requirements of the operational unit. Important information such as the location, names, and roles of crew members, the type of deployment and the disengagement order is provided in the alert information system; a flexible and effective mission visualization with an informational monitoring function included as a ‚bulletin board‘ for your organizational and social information. Incoming alert data can also be provided in paper format via a printing application.

Navigation with RDS Connected Drive

When connected to a host computer, RDS Connected Drive automatically takes over the coordinates and address data for route calculation and offers voice-guided navigation tailored to the needs of emergency crews.

- Integration in RDS Connected Command (and Mobile)
- Automatic acquisition of coordinates or address data from the lead operational computer
- Manual input of coordinates or address as destination data for navigation
- Emergency services routing: activation of one-way streets, pedestrian zones, or bus and taxi zones for emergency services
- Reactive driving time calculation due to the increased rapidity of emergency vehicles
- Navigation with road closures taken into account. Construction sites or street festivals can be manually input and the route calculated accordingly
- HGV restrictions



RDS Connected Command Mobile App



RDS Connected Command Alarm Monitor



OPERATIONS MANAGEMENT

The operational leader receives access to all mission-relevant information via a tablet. The user-friendly preparation of content that is relevant to the situation enables quick and intuitive system operation. Maps, plans, datasheets, vehicle rescue cards, and drone live streams are available at all times. Offline as well as online.

Functions at a glance

Alert data

The alarm data transmitted by the command center summarizes the most important information about the operation: location and time, as well as further details such as alarm keywords or notifications.

Situational view and guidance

Incoming alarm data provides information about the current situation on scene and marks the location on the digital situation map. The situational view shows the current conditions such as hydrants, buildings, hazards, and the development at the scene of the emergency. Tactical signs and graphical symbols are available for locational management and the identification of danger zones in addition to the real-time deployment of emergency services and the deployment environment.

Drone integration

The integration of drone information into RDS Connected Command provides a second perspective at the scene of the emergency, and thus a more comprehensive image of the situation. This enables decisions to be made on the basis of a broader collection of data

Operational messenger

The integrated messenger function facilitates the exchange of information during an operation - within a closed network across all end devices. Sending and receiving text and voice messages is just as straightforward as transmitting videos, images, and other content such as fire protection plans, datasheets, etc. The messenger serves as a supplement to existing operational communications via radio, relieves this, and acts as a first step in documenting an operation.

Checklists and standard operational rules

Checklists and standard operational rules provide the ideal tool for keeping everything on track.

- With RDS Connected Command, checklists, standard operational rules, guidelines, and operative commands can be created in a structured form and in coordination with building- and operation-specific workflows.
- You can see at a glance what has been completed and what remains to be done. The status of each work step is displayed.
- RDS Connected Command meets the requirements for documentation according to DV 100.

Fire protection plans and building data

From a simple building data sheet to a comprehensive fire protection plan: RDS Connected Command manages specific information, fire protection plans or maps, images and notes for each building, which can be stored on the situation map for individual buildings. It is possible to work with dynamic situational guidance directly on the pages of a document (e.g. insertion of tactical symbols, danger areas on fire protection plans, etc.).

Vehicle rescue information

- Fully integrated with more than 7,400 vehicle models and over 30,000 model variants for cars, trucks, buses, and vans in all drive configurations
- The system describes all application-relevant safety and drive components by means of interactive datasheets. This information forms the basis for efficient rescue from vehicles involved in accidents
- Monthly database updates
- Possibility of license plate checks

Hazardous material data

To know about risks and the correct handling of any dangerous goods, RDS Connected Command provides integrated access to the hazardous materials databases, such as, for example, 'Roter Hommel' (published by Springer). These databases contain information on chemicals, their hazards, release, handling, and guidelines for action in the event of accidents in uniformly laid out datasheets. The free „Emergency Response Intervention Cards“ (ERI Cards) database can be used as standard.

Additional modules and functions*

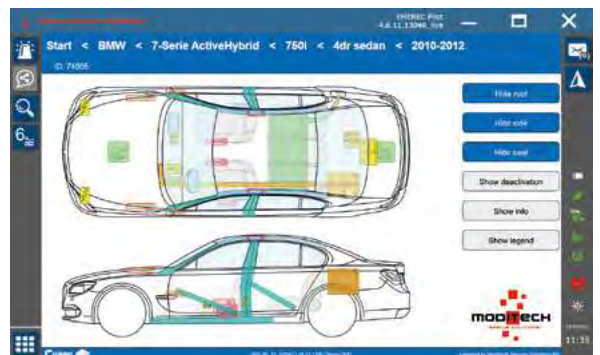
- Event diary: Structured documentation of all operation-related information
- Resources: Overview of the status of all deployed resources*
- Video: Access to camera systems (traffic cameras, drones, dashboard cams, body cams, etc.)*
- Integration: Links to other applications in the desktop

* Some functions require individual adaptations to or interfaces with sub-systems, which must be created in the framework of a project.



DOCUMENTATION

With RDS Connected Command, the entire operation is automatically documented. Thanks to this machine-based recording of telemetry, GPS, sensor, communication and command data, which is accurate to the second, documentation is performed without delay and thus - in contrast to post-operation memory-based documentation - without gaps. This reduces the documentation effort to a minimum and also makes the entire process paperless.





RDS CONNECTED DRONES

Saving valuable minutes when it counts

Those who know more make better decisions. Often, however, there is not much time for analysis. This is especially true for emergency response organizations. The use of drones makes it possible to obtain the necessary information more quickly: the flying sensors allow you to quickly survey locations, locate hotspots, detect hazardous substances, or find missing persons more effectively. This means a big step forward in increasing situational understanding, as well as in safety and cost efficiency.

Full integration

All data from the drone is fed directly into RDS Connected Command and our Connected Drone software, making it available to the operation's decision makers. This visual (and, depending on the sensor, also thermal) information can be used while on-the-move, and displayed and processed in the command center. This enables better decisions on the efficient and safe use of resources (personnel, vehicles and equipment). All with secure and encrypted communication with software, 100% directly from Rosenbauer.

Advantages at a glance:

- Perfect operational overview in seconds
- Full integration into operations management system
- Increased protection for the crew
- Reduction of costs

DRONES

DJI Matrice 30

The Matrice 30 drone is an extremely versatile yet compact tool with a wide range of capabilities. It has been optimized to meet the needs of emergency response organizations and will soon also be available in a stationary dock version. With high-resolution thermal and visual cameras, the M30 supports up to 16x optical zoom and features thermal imaging and a laser range finder.

- Thermal imaging camera: 640 x 512, 30 Hz
- Visual camera: Zoom camera: 48 MP, 5x-16x optical zoom Wide-angle camera: 12 MP
- Laser range finder: 3-1,200 m, +/- 0.2 m (9.8-3,937 ft, +/- 0.6 in)
- Up to 41 min flight time, wind resistance up to 15 m/s, 7,000 m (22,965.9 ft) flight altitude
- Top speed of 23 m/s
- Omnidirectional obstacle detection
- Protection class IP55
- New improved remote control device with large 7" display

DJI Matrice 300 (RTK)

The Matrice 300 (RTK) is the latest commercial drone platform from DJI, inspired by state-of-the-art flight systems. With up to 55 minutes of flight time, advanced KI capabilities, omnidirectional detection and positioning system, and much more, the M300 (RTK) sets new standards by combining intelligent functions, high performance, and unrivaled reliability.

- Max. range: 15 km (9.3 mi)
- Max. flight time: 55 min
- Omnidirectional detection and positioning system
- Protection class: IP45
- Operating temperature: -20 °C to +50 °C (-13 °F to +10 °F)
- Battery system with hot swap
- H20T sensor:
 - Zoom camera: 20 MP, Optical hybrid zoom: 23x, Max. zoom, 200x
 - Wide-angle camera: 12 MP
 - Laser range finder: Distances up to 1,200 m (3,937 ft)
 - Radiometric thermal imaging camera: 640 x 512 pixels, 30 Hz, 30 fps



DJI Matrice 30



DJI Matrice 30



DJI Matrice 300



Getac F110



RDS CONNECTED EQUIPMENT

The RDS Connected Equipment range includes telematics modules installed both in vehicles and on technical equipment, as well as end devices and accessories optimized for use by fire services.

Tablets

RDS Connected Command is based on MS Windows, which means that conventional hardware can be used to operate the application. Rosenbauer offers a selection of robust and field-proven mobile and stationary devices on the basis of this, such as, for example:

Getac F110 - RDS Connected Edition

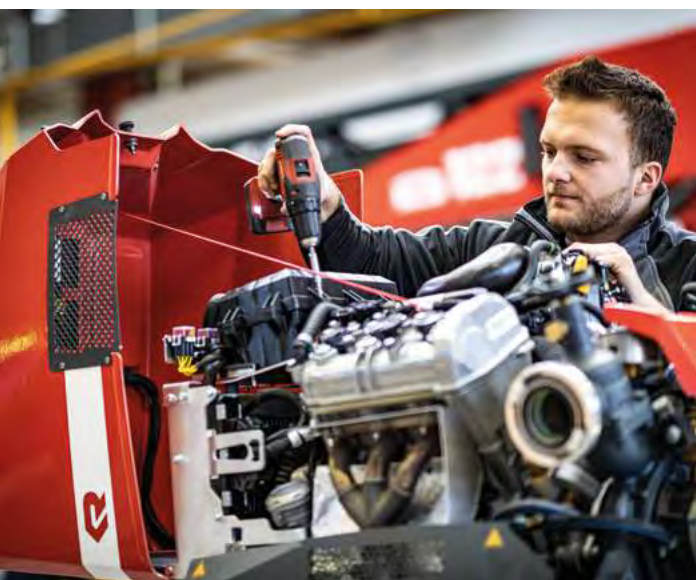
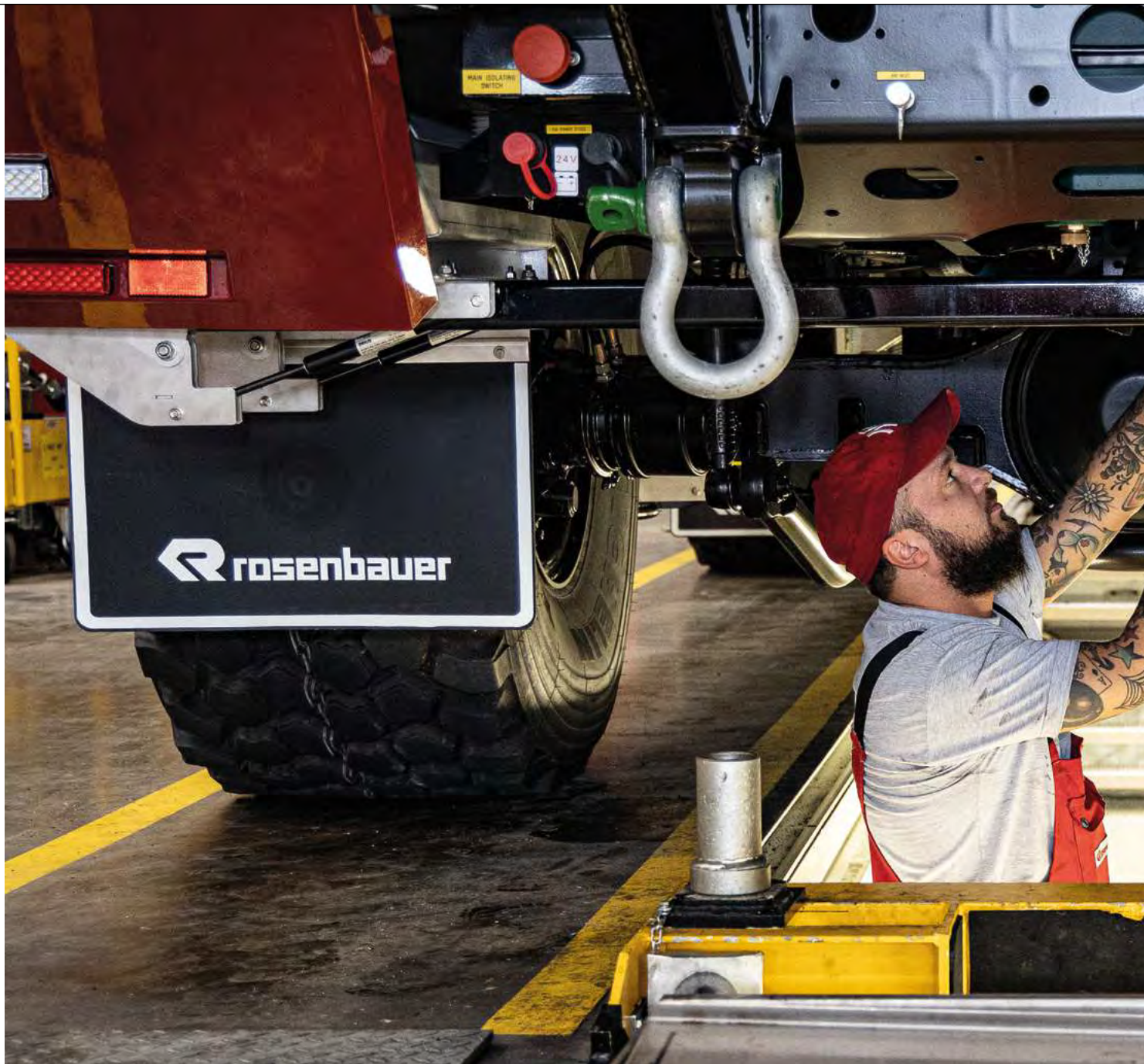
A robust tablet that has been specially designed for the requirements of fire departments and to withstand tough conditions.

- The dual-mode touchscreen allows operation with both a stylus and by touch
- Even in strong sunlight, the 11.6" display remains easily legible
- Uninterrupted battery replacement guarantees long running times
- Certified protection against shock, water jets, vibrations, dust and extreme temperatures (IP65, MIL-STD-810G, MIL-STD-461G)
- 3-year bumper-to-bumper warranty



SERVICE PACKAGES

12



SERVICE PACKAGES FROM ROSENBAUER

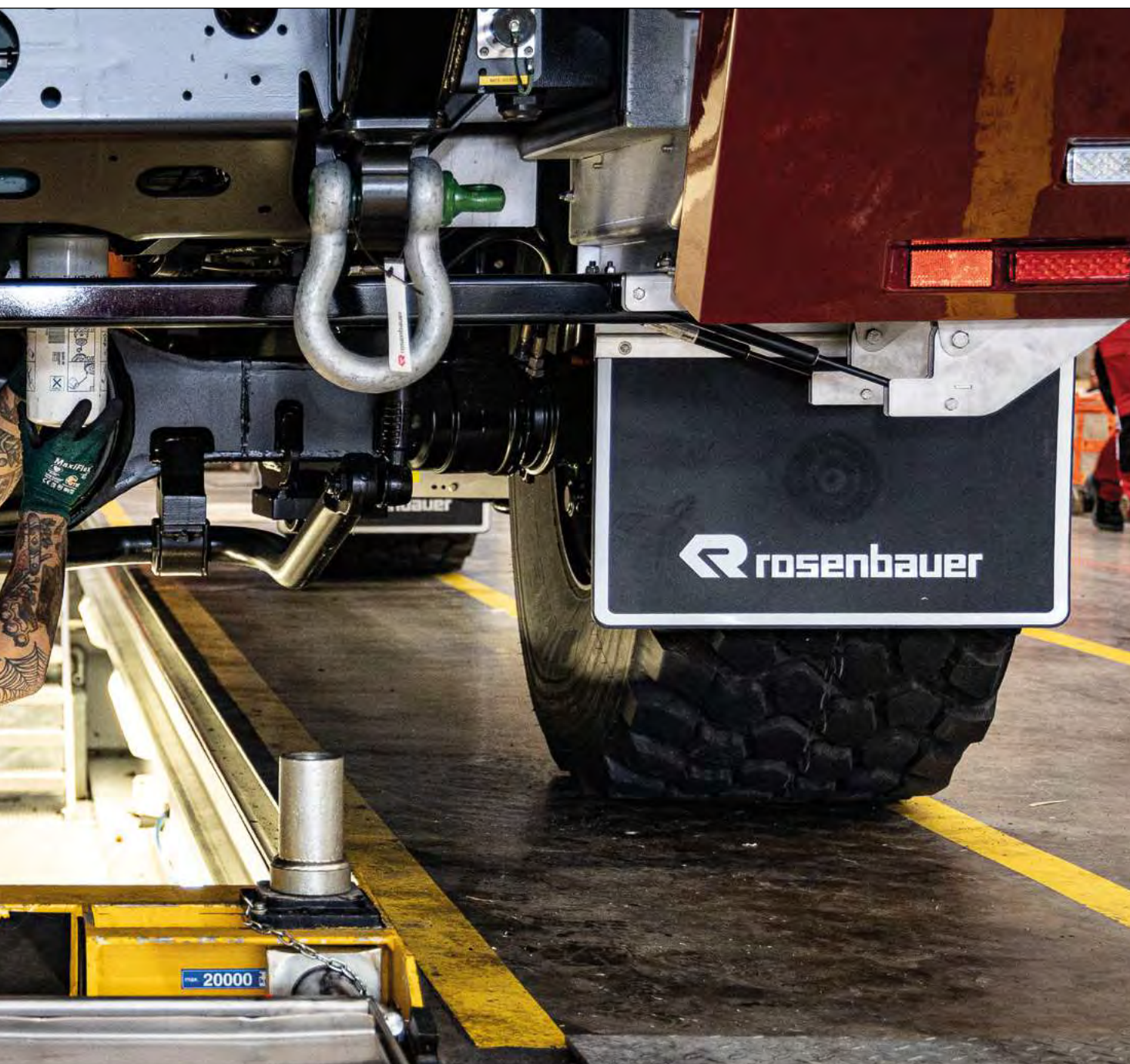
Few jobs are more important than firefighting. Rescue, recovery, extinguishing, and protection are the main tasks. The safety of people is always the top priority.

That is why Rosenbauer ensures optimal operational readiness of the firefighting vehicles and equipment with regular care, maintenance, and scheduled full service. Regardless of whether your equipment is new or has already seen years of reliable use, regular service will maximize operational safety.

The tasks of fire departments are demanding and challenging. With the Inspection BASIC, Service PLUS, Service PRO and Service ALL-IN service packages, the Rosenbauer service teams take care of the timely execution of upcoming service and, if necessary, repair measures according to the manufacturer's instructions.

With planning reliability, risk minimization and the 'everything from a single source' concept, there are major advantages for the customer.

Service packages



Services	Inspection BASIC	Service PLUS	Service PRO*	Service ALL-IN
Reminder about upcoming service	●	●	●	●
Visual check	●	●	●	●
Functional check	●	●	●	●
Detailed report, condition assessment, any recommendations for repairs and improvements	●	●	●	●
Complete maintenance according to manufacturer's specifications		●	●	●
Setting work		●	●	●
Calibration of the sensors			●	●
Lubrication service			●	●
Repairs incl. spare and wear parts				●
Fleet management				●
Extended warranty				●

*for aerial rescue only



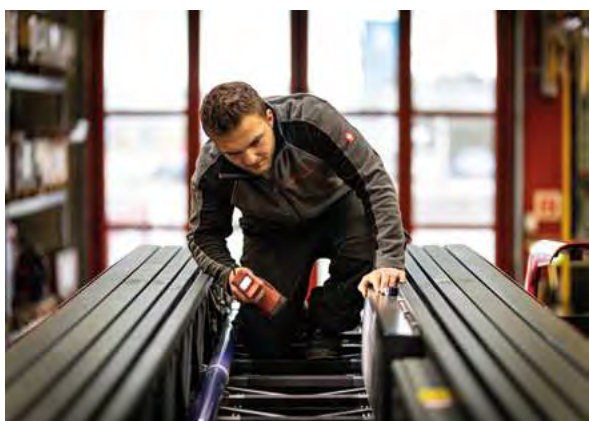
INSPECTION BASIC

Regular inspection is critical to value retention and the safe functioning of your vehicles and equipment. Certified technicians check the fleet down to the smallest detail and inform you personally and by means of a report on the condition of your vehicles. Any defects are immediately identified and communicated to you along with a recommendation for repair.



SERVICE PLUS

To keep your vehicle at peak performance and in perfect condition, it is essential to rely on both authorized and qualified Rosenbauer technicians as well as original Rosenbauer spare parts and accessories. With Service PLUS, Rosenbauer maintains your vehicles and equipment strictly in accordance with the manufacturer's specifications and intervals, carries out any necessary adjustments, and thus delivers reliability and safety.



SERVICE PRO

As part of Service PRO, Rosenbauer maintains and calibrates the sensors of your aerial rescue devices and updates the software of the electronic system. You benefit from Rosenbauer's many years of experience and expertise in the aerial rescue sector.



SERVICE ALL-IN

The tasks of fire departments are becoming more and more demanding. It's not easy to take care of the technical and administrative aspects of the vehicle fleet. Let Rosenbauer handle it with Service ALL-IN, so that you can focus on the what matters most, namely protecting and saving lives. Full-service for you, your fleet, and your equipment. Rosenbauer not only plans and implements all service activities, but takes vehicles under warranty. Relieve your maintenance department and your team of these responsibilities, save costs for training as well as equipment and trust in the efficiency of Rosenbauer Service, who will work alongside you to ensure the functionality and operational readiness of your fleet.

REFURBISHMENT

Refurbishment

"As good as new"

Years of demanding use of the equipment leave their mark on the paint and bodywork. Rosenbauer performs various refurbishment tasks on your vehicles and equipment. From superstructure to chassis, Rosenbauer has the optimum solution for every type of refurbishment requirement.

Upgrading

"New fittings for new requirements"

New requirements can be better met by retrofitting. Here too, Rosenbauer is your expert partner. For example, Rosenbauer retrofits extinguishing and light mast systems, water turrets, proportioning systems, or holders for storing new equipment. We can handle conversions for you as well. Rosenbauer reorganizes and optimizes your stowage systems, such as rotating compartments, SCBA holders, or slide trays through a more functional arrangement and adapts equipment compartments to the changed equipment by means of a special conversion.



Before



After

A		Firefighting helmet HEROS H30	22
		Firefighting helmet HEROS Matrix	29
AVON Mi-TIC	73	Firefighting helmet HEROS Titan	12
		Firefighting helmet HEROS Titan Pro	19
B		Firefighting robot	165
		Firefighting suits	50
Battery extinguishing system	98	Fireline accessories	94
Battery- LED Lighting systems RLS2000 and RLS1000	138	Fittings	96
Battery-powered fan	143	FLIR thermal imaging cameras	75
BEAVER	119	FOX	114
Boots	39	FOX S	114
BOROS	40		
BOROS B1	42	G	
BOROS B2	43		
BOROS B3 Cross	43	GAROS G10	64
BOROS B4	44	GAROS G30	62
		GLOROS T1	69
C		Gloves	68
		Gloves for technical rescue operations	69
Care of protective clothing	66		
Care products for firefighting boots	47	H	
CeoTronics radio telephone sets	33		
Compressed air foam system	100	Helmets	9
		HEROS H30	22
D		HEROS Matrix	29
		HEROS Titan	12
Digital Solutions	171	HEROS Titan Pro	19
Drones	180	High-performance fans	143
		High pressure fog gun NEPIRO Ergo	86
E		Hoses	96
		Hoses and fittings	96
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F		I	
FANERGY	146	Imtradex radio telephone sets	35
Fans	143		
FIRE FIT 2	60	L	
FIRE FLEX	52		
FIRE MAX 3	56	LED lighting systems	138
Firefighting boots BOROS	40		
Firefighting boots BOROS B1	42	M	
Firefighting boots BOROS B2	43		
Firefighting boots BOROS B3 Cross	43	Mi-TIC thermal imaging cameras	72
Firefighting boots BOROS B4	44		
Firefighting gloves GLOROS T1	69	N	
Firefighting gloves SAFE GRIP 3	68		
Firefighting helmets	9	NAUTILUS submersible pump	109
		NAUTILUS 8/1	111

NAUTILUS 4/1	112	RFC POLY Skid	108
NAUTILUS 4/1 ECO	113	RFC POLY Trolley	108
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O		Rolling containers	153
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Protective boots	39	Technical assistance suit GAROS G30	62
Protective clothing	49	Thermal imaging cameras	71
Protective gloves	68	TORNADO with chainsaw protection	46
Protective hoods	67	U	
Protective suit for technical rescue	62		
Protective suit for wildfire	64	UHPS (ultra-high pressure system)	104
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