

ZUMRO RESQ™

Zumro Resq Catalogue



*innovative
for life!*

**ZUMRO
RESQ™**

www.zumroresq.com

e-mail: info@zumro.nl

Welcome to the ResQ Organisation

Zumro BV, and its sister company in the USA, ResQ Tek Inc. and Zumro ResQ Asia Sdn. Bhd. in Malaysia, provide to the Emergency Services the finest and most innovative rescue equipment ever produced.

Zumro BV was established in 1971 and introduced the Rescue Tool concept in Europe. The unique requirements of many different countries led to the customer-driven company of today, truly the most innovative in the industry.

Our total rescue solution comprises a complete state-of-the-art range of:

The unique NT ResQ Bags

Conventional ResQ Bags (8 Bar, Low Pressure, Pipe Sealing Plugs)

PALLS (Pneumatic Aircraft Lightweight Lifting System)

Hydraulic ResQ Equipment

Cribbing Blocks

Stabilizing Jacks

Airbag Safety System

Lighting systems: Q-Lite, Stem Lite

Positive and Negative Smoke Ejector

We pride ourselves on being the most progressive and innovative company. As a team of professionals, we are motivated by the desire to refine and optimize our products. We embrace challenging projects, and with the rescuers, we have developed the total rescue solution.

And therefore our mission statement is:

Together we innovate for life



LISSE, HOLLAND
HEADQUARTERS



ST. LOUIS, MO, USA



LISSE, RESQ BAGS PRODUCTION



SELANGOR, MALAYSIA



It is our business to constantly assess and re-assess the practical needs of the rescuers. But we can only achieve this by interacting with our customers, suppliers and colleagues in order to fulfill their requirements for the best equipment. We therefore welcome and value your assistance and cooperation in helping us find creative and practical solutions for your problems.

In cooperation with Research Institutes, several Technical Universities and NIBRA, we are continuously seeking better solutions to ease the task of the rescuer and to ensure safety. In recognition of the effectiveness of our efforts, Zumro BV has received international acclaim, including the Dutch Innovation Award and the German Design Award. In conjunction with the US Naval Research Laboratory, we are working to develop specialized products for ships for the next decades.

To further ensure quality, we are ISO 9001 certified and our production and product of NT ResQ Bags are RWTUV approved.



RWTUV



Res Q is a trade mark of ResQ Tek, Inc. and Zumro B.V., a Dutch corporation with over 30 years of experience in the development, refinement and application of emergency products. All products in the Res Q program, are supplied to you throughout our carefully selected dealer organizations, assuring you of expert service and assistance.



We thank our customers....

...for their support so that we can constantly improve our products! We invite our new customers to share their experiences with us so that we can further improve our product lines; or find new solutions for your demanding task.

We will design, manufacture and support, innovative and superior rescue equipment. We will always interact with our customers, suppliers and colleagues, with integrity and respect. Nothing we do is more important than creating the best value for our customers.



Axel J. Maarschalk,
Managing Director,
Zumro B.V.

Axel has, since 1972, been the driving force and catalyst for many innovations in the rescue industry, of which the latest innovations are the truly unique New Technology ResQ Bags.



Dennis Beck,
Export
Sales Manager

Dennis is responsible for the International Sales Activities. Due to his extensive international experiences gained during the 12 years, he has become a specialist in the utilisation of rescue equipment and appropriate techniques.



Dennet Wempe,
Customer
Service

Dennet is responsible for the after-sales services and training. He is the important liaison between our existing customers and our internal organization.



Bill Latta,
President,
ResQ Tek, Inc.

Bill is looking after the sales from U.S.A., Canada and Middle America.



GC Chua
General Manager
Asia

Chua is responsible for the newly set-up Asia Manufacturing Plant. The establishment of a permanent and dedicated centre in Asia will provide customer a prompt response and complete technical support.



Wan Kamaruddin Jalil
Customer Service
Manager

Wan is responsible for the After Sales Services of Asia Regional market. With his ten years of experience in fire & rescue industries, he will provide good products advise, training and technical support to customers.

The Netherlands Institute for Fire Service and Disaster Management

For all rescue equipment and accessories you will get instructions when the goods are delivered in order to work completely safe. If more detailed or in dept courses are necessary Zumro has a close cooperation with The Netherlands Institute for Fire Service and Disaster Management, NIBRA or other institutes. If necessary they can take care of the instruction or training on the spot.



All indications were carefully made and examined. We can, however, not undertake any responsibility for eventual mistakes or incompleteness. Subject to error and revision. As we constantly improve our equipment, please ask for our latest specification sheet.

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(F.A.Q.) *Frequently Asked Questions (F.A.Q.)*

Question: We have conventional high pressure and low pressure lifting bags. Why should we change?

Answer: Only the NT ResQ Bags can provide both the lifting height of the low pressure bag and the lifting force of the high pressure bag. They also have metal plates which allow the bags to be locked together with unique threaded double male connectors to achieve any lifting height desired.

Question: Why do the NT ResQ Bags have a higher capacity?

Answer: Lifting Force is always equal to Pressure x Area. The NT ResQ Bags have an integrated metal plate, which provides a large lifting area. Also, with their circular flat lifting area, the NT ResQ Bags do not lose capacity in the corners. And, they operate at 10 bar which is 25% greater than ordinary high pressure bags.

Question: Can you repair the bags?

Answer: If they are just penetrated without cutting the fibers, we can open the NT ResQ Bags at the metal plates point and repair them.

Question: What is the Safety Factor on the NT ResQ Bags?

Answer: The NT ResQ Bags have a Safety Factor of at least 4:1, which has been certified by the TÜV in Germany. (TÜV is the German equivalent to UL) **RWTV**

Question: How vulnerable are the bags to penetration?

Answer: The metal plate, along with the point load plate, protects the bags against sharp objects.

Question: Can you leave the stack of NT ResQ Bags standing alone?

Answer: Yes, by using the shutoff hose with safety relief valve you can disconnect the fill hose safely and work elsewhere with the remaining bags.

Question: Can you use the bags for flotation or recovery?

Answer: Yes, an inflated NT132 ResQ Bag displaces 350 ltr of water, generating 354 kg of lift. It does not increase its volume as it rises, so you can have a controlled ascent.

Question: Why didn't you use a standard air hose connector?

Answer: The worlds safest airbag deserves the safest connector. It also has a 4:1 safety factor and is a double acting coupling. First push of the button relieves the pressure, and the second push releases the connector.

New
Technology

RES Q-BAGS



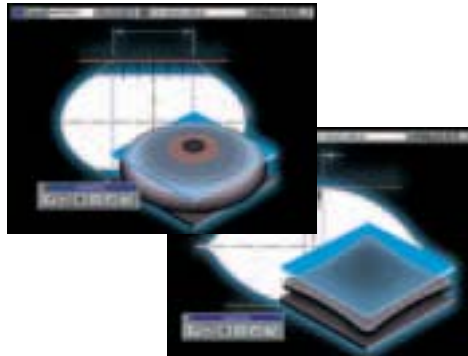
**ZUMRO
RES Q™**
*innovative
for life!*

ZUMRO RES Q NT - BAGS U

NT RES Q-BAGS

RWTÜV

ZU 481/1 und ZUA 481/101 by RWTÜV Duisburg
Certification Number 2004-6577 and 2045-8146



Designed in close
cooperation with the

Aerospace

Engineering faculty

at the Delft

University of

Technology in the

Netherlands

The New Technology ResQ Bags from Zumro B.V. provide the answer to the limitations and drawbacks of conventional high pressure and low pressure lifting bags. Designed in close cooperation with the Delft University of Technology in the Netherlands, and utilizing the latest in Computer Aided Design and Engineering, the NT ResQ Bags provide a radically different approach to pneumatic lifting.

Conventional bags had a number of shortcomings, such as:

- Stress points due to the shape of the 8 bar bags;
- Limited lifting height so stacking of larger lifting bags is necessary;
- Dangerous situation due to instability of inflated stacked bags;
- Instability due to no connection;
- Forced to use extensive blocking, this is time consuming;
- Point loading is not possible. Therefore blocking at the top and bottom is necessary. Complicated to handle and therefore used as last resource.



The New Technology ResQ Bag already exceeds the high requirements established for the forthcoming European CEN standards (prEN 13731) and have received the TÜV Certification.

WHAT ARE THE MAJOR ADVANTAGES?

- **Combining light weight with versatility through:**
 - adjustable maximum height
 - metal plates for safe attachment to other structures or each other
- **High performance during lifting and large remaining force**
- **Very high factor of safety**
- **Longer life span**



Conform prEN 13731



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Conventional Bag

NT ResQ-Bag



The NT ResQ Bags have solved these problems, because of:

- **Safe connection is possible meaning any desired height;**
- **Metal plates allow attachment to each other, to structures or to a point load plate;**
- **Underneath blocking is not necessary;**
- **Of course cribbing is necessary for safety;**
- **Very low insertion height (only a few centimeters); easy handling**
- **Reinforced fibres are continuously wound and placed where needed. Therefore is the weight half as much as conventional bags;**
- **The safety factor has increased dramatically due to the reinforced fibres.**

APPLICATIONS

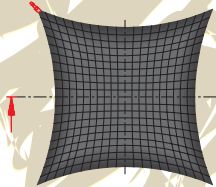
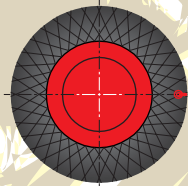
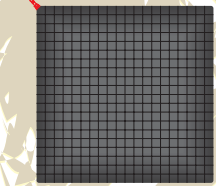
In order to meet the demand of our customers Zumro has manufactured the NT ResQ Bags in such way that they

can also be used in combination with conventional high pressure bags and equipment. However, they only achieve 80% of their rated lifting performance. This means that the safety factor increases but all other advantages remain unaffected as you work at a working pressure of 8 bar.

As the NT ResQ Bags are a modular system, you only have to carry individual bags to the scene. Therefore these New Technology Bags can be used for many purposes:

Lifting (e.g. cars, trucks, trains, subways, storage tanks and collapsed buildings)

- **Levelling**
- **Aircraft lifting**
- **Pipe sealing**
- **Restoring floating power**
- **Tank sealing**
- **Enlargement of an opening**



stress points

no stress points

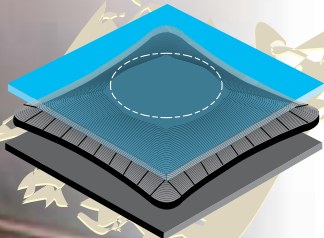
FORBIDDEN

connectable

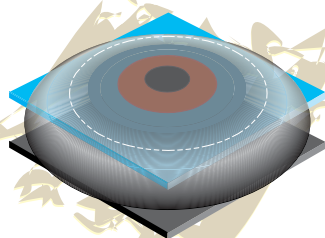
not connectable

unstable

stable



Pressure = 8 bar



Pressure = 10 bar

AREA=371.612mm² FORCE=29.729kg

FORCE=37.161kg

AREA=371.612mm²

FORCE=PRESSURE x AREA

AREA=2.581mm² FORCE=206kg

FORCE=7.290kg

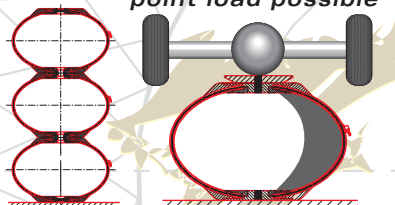
AREA=72.903mm²

no point load possible

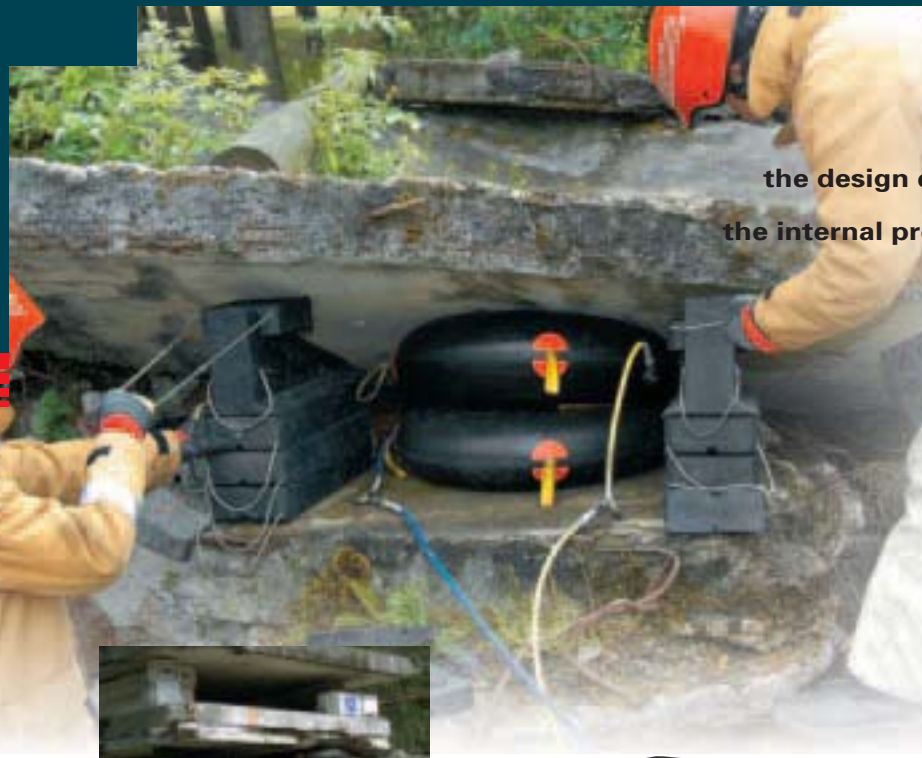
point load possible



blocking is necessary
limited lifting height



underneath blocking
not necessary



Dual Controller
art. nr. 8700.0500

ANY REQUIRED LIFTING HEIGHT
The New Technology ResQ Bags are unique due to the following inventions. Each NT Bag has a metal plate allowing a safe application of point loads. The NT ResQ Bags are made of Aramid fibres which transfer the internal pressure directly to the integrated metal plate.

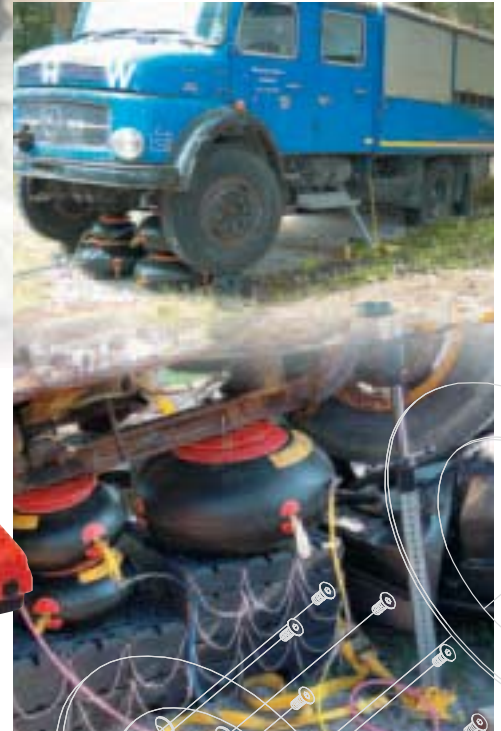
Another unique characteristic of the NT ResQ Bags is the use of closed connectors. Each NT Bag can be inflated individually to the desired working pressure for an even higher degree of control and safety!

LOW WEIGHT
Due to the low weight of the New Technology ResQ Bags the rescuers do not have to carry excessive weight (blocking material) or oversized bags to the scene.

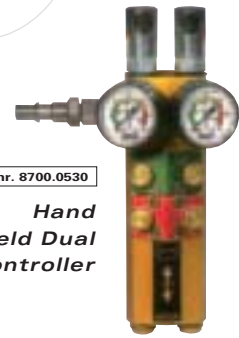
OPERATION
The NT ResQ Bag hoses cannot be disconnected accidentally due to the use of an extra safe quick release connector. You have to press the release button twice to disconnect a hose. The first press releases the pressure; the second allows the disconnection of the hose. The hoses are fed by a handheld dual controller equipped with a dead-man return safety valve. This controller has two manometers allowing you to monitor the working pressure

the design enables the Aramid fibres to transfer the internal pressure directly into the metal plates.

and therefore the inflation and deflation of the connected bag can be controlled very



thoroughly. The dual connectable controller can be connected to have four bags under control.



art. nr. 8700.0530

Hand Held Dual Controller



Conform prEN 13731



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AIRCRAFT RECOVERY

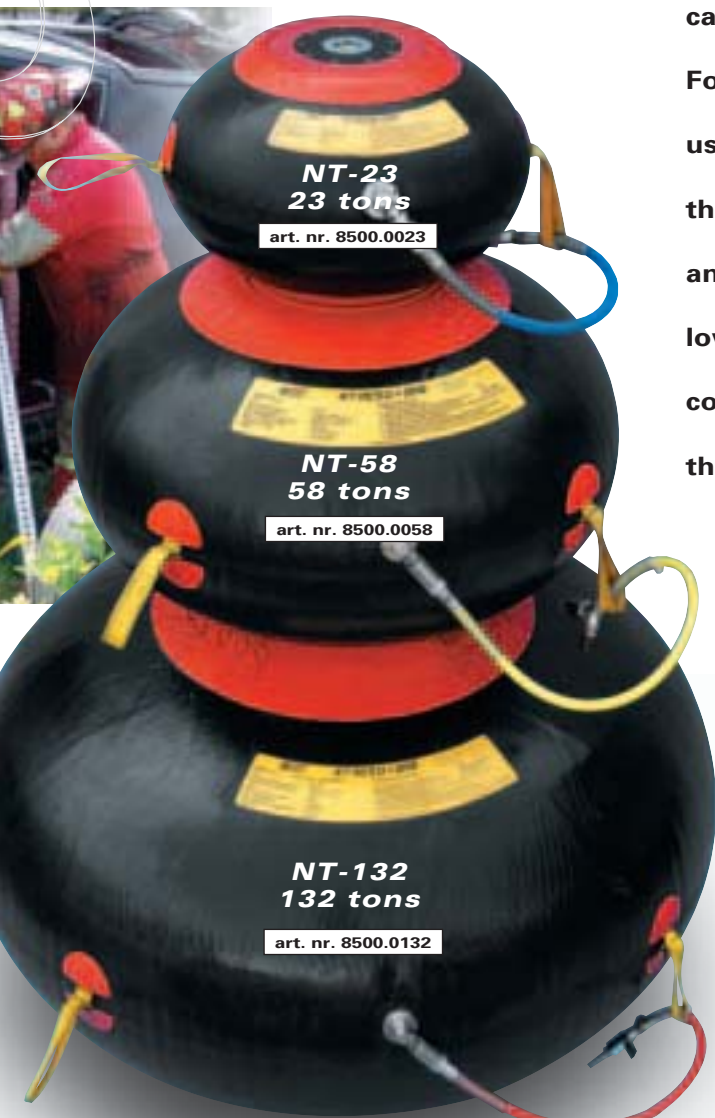
For lifting aircraft you can use a single column of NT ResQ Bags. The bottom bags will do the lifting while the top bag will be inflated to 0.5 Bar allowing

the bag to mould itself to the skin of the aircraft. For larger planes we use multiple columns with the load transfer platform and the 'skin adjustable' low pressure bag also for moulding itself to the skin of the aircraft.

Again the system is completely modular and can be adapted to your specific demands. Please contact us for further information.

"For lighter planes you can use a single column.

For larger planes, use multiple columns with the load transfer platform and the 'soft landing' low pressure bag contacting the skin of the aircraft."



Please note: the photograph above is an example of the 3 different sizes of NT ResQ bags available. It is not recommended to stack them as shown



ZU 481/1 und ZUA 481/101 by RWTÜV Duisburg
Certification Number 2004-6577 and 2045-8146

Technical specifications of the round bags

Type	NT-23	NT-58	NT-132
Weight (kg)	7	15	32
Lifting Height (mm)	n x 275	n x 445	n x 665
Min. height centre t2 (mm)	45	50	65
Min. height edge t1 (mm)	10	10	10
Working Pressure (Bar)	10	10	10
Min. lifting capacity (1.000 kg)	>4	>5	>6
Max. lifting capacity (1.000 kg)	23	58	132
Min. diameter inflated (mm)	405	665	1.000
Max. diameter deflated (mm)	520	860	1.300
Safety Factor	>4	>4	>4
Water Volume (l)	22	99	350
Max. air volume 10Bar (l)	242	1.089	3.850

n = number of stacked bags. Note: volume air-bottle 6 l x 300 Bar = 1 800 l
Temperature range tested by Tüv: -20°C t/m +65°C

Note: Tolerance dimensions and mass max. +/- 10%

SUMMARY

The tremendous technological advantages offered in the NT-ResQ Bags range and accessories provide maximum versatility, safety, reliability, and high performance with only minimal weight (32 kg/70.5 lb. for the NT-132)

NOW IT'S UP TO YOU TO MAKE YOUR DECISION!

Join our team and enjoy the benefits of yet another new ZUMRO RESQ system. Rest assured that you won't be disappointed.

Modules

- Closed Connector
- Point Load Connector
- Point load plate
- Custom Designed Load Plates

Miscellaneous

- Inflation hose 5m/16ft and 10m/33ft (red/yellow/blue/cyclam)
- Shut-off Hose with safety Valve
- Controllers (Dual/Single)
- Pressure Reducers
- Carrying Bags
- Polar Key
- Storage Case



Connectable Hand Held Dual Controller

art. nr. 8700.0550



Pressure Regulator + 2m. hose

art. nr. 8700.0590

Closed Connector

art. nr. 8700.2050

Point Load Plate Plug

art. nr. 8700.2075

Shut off Hose with Safety Valve

art. nr. 8700.1255



Inflation hoses 5 or 10mtr

art. nr. 8700.1010

Point Load Plate

art. nr. 8700.3015

Polar Key

art. nr. 8700.2000

art. nr. 8700.0500

Dual Controller



Accessories Storage Case

art. nr. 8700.0755

Ixwxh 660x520x240mm



art. nr. 8700.0710

Rubber Mat NT Bags



art. nr. 8700.0620

Twin Cylinder Connector

art. nr. 8700.1023 art. nr. 8700.1058 art. nr. 8700.1132

Storage case	NT-23	NT-58	NT-132
Lenght (mm)	600	930	1370
Width (mm)	600	930	1370
Height (mm)	64	60	75

10 ZUMRO RESQ NT-BAGS



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art. nr. 8500.0100

Set A (75 kg) :

- 1 x NT-23 ResQ Bag
- 1 x NT-58 ResQ Bag
- 1 x NT Hand Held Dual Controller
- 1 x NT Regulator 300 Bar with 2m hose
- 1 x NT Delivery Hose (yellow) 10m
- 1 x NT Delivery Hose (blue) 10m
- 1 x NT Shut Off Hose + Safety valve (yellow)
- 1 x NT Shut Off Hose + Safety valve (blue)
- 1 x NT Point Load Plate
- 1 x NT Polar Key
- 1 x NT Connector plug closed
- 1 x NT Point Load plug
- 1 x NT Storage Case for all Accessories
- 1 x Hard Storage Case NT-23
- 1 x Hard Storage Case NT-58

art. nr. 8500.0110

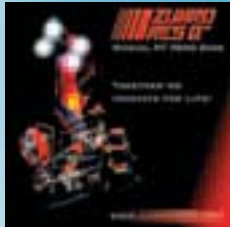
Set B (115 kg) :

- 2 x NT-23 Bag
- 2 x NT-58 Bag
- 1 x NT Hand Held Dual Controller
- 1 x NT Connectable Dual Controller
- 1 x NT Regulator with 2m hose
- 2 x NT Delivery Hose (yellow or red) 10m
- 2 x NT Delivery Hose (blue or cycloam) 10m
- 2 x NT Shut Off Hose + Safety valve (yellow)
- 2 x NT Shut Off Hose + Safety valve (blue)
- 1 x NT polar Key
- 3 x NT Connector plug closed
- 2 x NT Point Load Plate
- 2 x NT Point Load Plate plug
- 1 x Storage Case for all Accessories
- 2 x Hard Storage Case NT-23
- 2 x Hard Storage Case NT-58

art. nr. 8500.0120

Set C (155 kg) :

- 4 x NT-58 Bag
 - 1 x NT Hand Held Dual Controller
 - 1 x NT Connectable Dual Controller
 - 1 x NT Regulator with 2m hose
 - 2 x NT Delivery Hose (yellow or red) 10m
 - 2 x NT Delivery Hose (blue or cycloam) 10m
 - 2 x NT Shut Off Hose with Safety valve (yellow)
 - 2 x NT Shut Off Hose with Safety valve (blue)
 - 1 x NT polar Key
 - 3 x NT Connector plug closed
 - 2 x NT Point Load Plate
 - 2 x NT Point Load Plate plug
 - 1 x Storage Case for all Accessories
 - 4 x Hard Storage Case NT-58
- Option (247 kg): art. nr. 8700.0130
- 2 x NT-132 Bag
 - 2 x Hard Storage Case NT-132
 - 2 x NT Connector plug closed



All customers will receive our 2004 NT ResQ Bag CD-Rom Training Program

ADVICE: If you want to use air cylinders, then you need for:

- Set A: 1 air cylinder
- Set B: 2 air cylinders
- Set C: 3 air cylinders
- Set C with options: 6 air cylinders

Starters kit

- | | | |
|-----------------|-----------|--------------------|
| Starters kit 23 | 2 x NT-23 | art. nr. 8700.0135 |
| Starters kit 58 | 2 x NT-58 | art. nr. 8700.0140 |

NT RES Q-BAGS

RES Q-BAGS

lifting height Lifting Capacity at 10 bar working pressure in kgs lifting height

Lifting Capacity at 8 bar working pressure in kgs

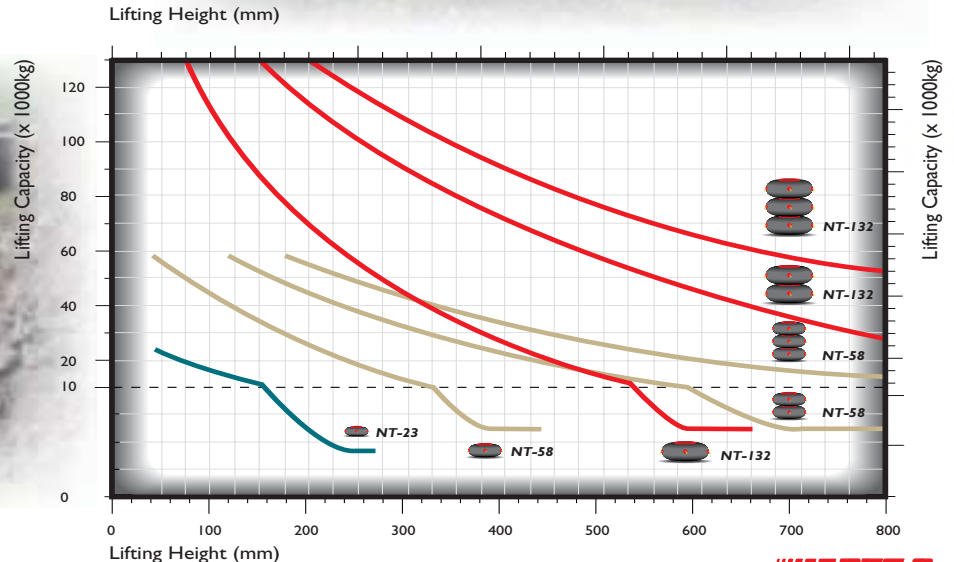
mm	NT-23	NT-23x2	NT-58	NT-58x2	NT-58x3	NT-132	NT-132x3	mm
25								25
44	23,000							44
50	22,277							50
53								53
60	20,889		58,000				132,000	60
75								75
80	18,007		51,957				124,400	80
90		23,000						90
100	15,802	22,277	47,295	58,000		116,800		100
120	13,659	20,889	42,876	56,534		109,000		120
125								125
140	11,400		38,638				102,500	140
150					58,000			150
159								159
160	9,635	18,007	34,639	51,957		95,200		160
175								175
180	7,852		30,919		56,534	88,600	132,000	180
200	6,271	15,802	27,387	47,295		82,200		200
220	5,021		24,057			76,300		220
225								225
240	4,094	13,659	20,929	42,876	51,957	70,000	124,400	240
250								250
260	4,000		17,991			64,053		260
275	4,000							275
280		11,400	15,294	38,636		47,295	53,600	280
300			12,872				48,823	300
320		9,635	10,651	34,639				320
325								325
340			8,574			44,143		340
350								350
360		7,852	6,710	30,919	42,876	39,400	109,000	360
375								375
380			6,000			34,589		380
400		6,271	6,000			30,330		400
420			6,000		38,636	27,400	102,500	420
425								425
440		5,021	6,000	24,057		25,872		440
445			6,000					445
450								450
460							23,000	460
475								475
480		4,094	20,929	34,639	17,500	95,200		480
500					14,558			500
520		4,000	17,991		12,750			520
540				30,919	10,000	88,600		540
550		4,000						550
560			15,294					560
580						8,400		580
600			12,872	27,387	6,000			600
620					6,000		82,200	620
640			10,651		6,000			640
650					6,000			650
660				24,057	6,000		76,300	660
665					6,000			665
680			8,574					680
700								700
720			6,710	20,929		70,000		720
740					6,000			740
760								760
780					17,991		64,053	780
800					6,000			800
820								820
840					6,000	15,294	58,631	840
860								860
880					5,000			880
900						12,872	53,600	900
920								920
940						10,651	48,823	940
960								960
980								980
1,000						8,574	44,143	1,000
1,020								1,020
1,040								1,040
1,060								1,060
1,080					6,710	39,400		1,080

mm	Z1/SQ	Z3/SQ	Z6/SQ	Z8/SQ	Z12/SQ	Z19/SQ	Z24/SQ	Z31/SQ	Z40/SQ	Z54/SQ	Z64/SQ	mm
25	1000	3000	6000	8000	12000	19000	24000	31000	40000	54000	64000	25
44												44
50	600	2300	4850	6500	10000	16500	21250	27500	35750	50000	57500	50
53												53
60												60
75	200	1600	3750	5000	8000	14000	18500	24000	31500	43200	51000	75
80												80
88												88
100		1000	2750	3750	6250	11600	15600	21000	27900	37300	46000	100
120												120
125		400	1800	2500	4500	9100	12700	18000	24300	33600	41000	125
140												140
150												150
159			600	1500	3050	6850	9650	14450	20150	28000	35150	159
160												160
175				1000	2400	5800	8200	12800	18200	25000	32400	175
180												180
200					1700	4400	6450	10750	15650	22000	28350	200
220												220
225					1000	3000	4700	8700	13100	19000	24300	225
240												240
260						2000	3300	7000	11050	16000	20800	260
275								1000	1900	5300	9000	275
280												280
300									1200	3850	7250	300
320												320
325									500	2400	5500	325
340												340
350										1700	4000	350
360											7300	360
375											5400	375
380											8200	380
400											6500	400
420										1750	4100	420
425											4800	425
440										1000	2700	440
445												445
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940												940
960												960
980												980
1,000												1,000
1,020												1,020
1,040												1,040
1,060												1,060
1,080												1,080

ZUMRO RES Q NT-BAGS



THW Germany user of 72 sets



Conform prEN 13731



Res Q is a trade mark of ResQ Tek, Inc. and Zumro B.V., a Dutch corporation with over 30 years of experience in the development, refinement and application of emergency products. All products in the Res Q program, are supplied to you throughout our carefully selected dealer organizations, assuring you of expert service and assistance.

"The Conventional ResQ Bags give you a high lifting

capacity on a relatively small area with a limited lifting height. All bags are Kevlar reinforced and

have a working pressure of 8 Bar.

Features:

- Capacity 1-64 tons
- Lightweight, durable and Kevlar reinforced
- Bright yellow center mark for exact locating of the bag
- Exclusive non-slip matrix pattern
- Safety factor 4:1
- Neoprene rubber is highly chemical resistant
- Air inlet connectors are replaceable in case of damage
- Inter-connectable with 8 Bar systems
- Temperature range -40° C to 110° C
- Test pressure 12 Bar
- All hoses have a safety factor of 4 : 1
- Double acting safety mode on quick release couplings

i.d. = inner diameter, o.d. = outer diameter

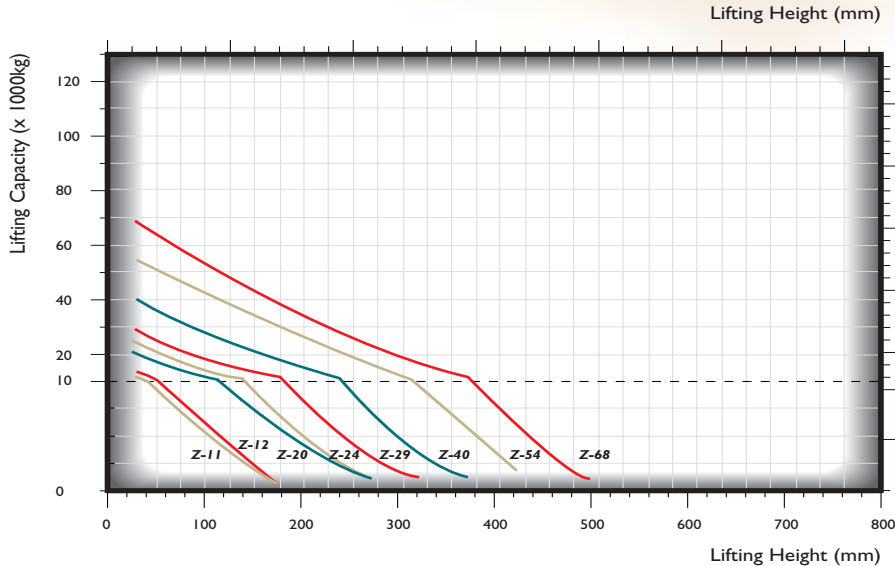


Boxed Dual Controller art. nr. 8700.0500 V

TECHNICAL SPECIFICATIONS Working Pressure [8 bar] Safety Factor [< 4]

	Z1/SQ	Z3/SQ	Z6/SQ	Z8/SQ	Z12/SQ	Z19/SQ	L24/SQ	Z24/SQ	Z31/SQ	Z40/SQ	Z54/SQ	Z64/SQ
Size (cm)	15 x 15	22,5 x 22,5	30 x 30	38 x 38	45 x 45	55 x 55	32 x 102	61 x 61	69 x 69	78 x 78	87 x 87	91 x 91
Thickness (mm)	28	28	28	28	28	28	28	30	30	30	30	30
Max. lifting height (cm)	7	13	15	18	22	27	20	30	36	42	45	51
Max. lifting capacity (kg)	1050	3040	6050	8700	12800	20000	21950	25080	32200	42050	53800	63700
Max. lifting capacity (USt)	1,16	3,35	6,67	9,59	14,11	22,05	24,20	27,65	35,49	46,35	59,30	70,22
Weight (kg)	0,6	1,3	2,4	4	5,3	8,1	8,5	11,2	13,3	18,2	22,5	25,3
Max. working pressure (bar)	8	8	8	8	8	8	8	8	8	8	8	8
Test pressure (bar)	12	12	12	12	12	12	12	12	12	12	12	12
Bursting pressure min. (bar)	32	32	32	32	32	32	32	32	32	32	32	32
Max. air requirement (ltr)	5	15	42	86	152	296	224	416	621	921	1305	1505

art. nr. 8100.0092 | art. nr. 8100.0101 | art. nr. 8100.0102 | art. nr. 8100.0104 | art. nr. 8100.0108 | art. nr. 8100.0115 | art. nr. 8100.0135 | art. nr. 8100.0148 | art. nr. 8100.0155 | art. nr. 8100.0165 | art. nr. 8100.0175



CONTROLLERS

There are three different types of Controllers available:

- Single Controller**
- Hand Held Dual Controller**
- Boxed Dual Controller**

The Controllers are available for the conventional 8 Bar system and the New Technology 10 Bar.



rescue bags

Zumro Low-Pressure Bags

The Low-Pressure Bags are made of nylon with a heavy duty neoprene coating. ResQ has made the sides of the Low-Pressure bags bright yellow, by which they are much more visible, even at night.

To ensure ultimate safety, each bag has its own safety (relief) valve built into the side. So you can easily disconnect the bag from the delivery hose. Seven internal restraint webs provide the best stability, when under load as well as free-standing.

The one-way flow connector has been integrated to a screwable PVC in/deflation port, which allows fast deflation.



Adapter Kit

art. nr. 8100.0610



Type	A(0,5Bar)	B(0,5Bar)	C(0,5Bar)	D(0,5Bar)
Diameter (cm)	61	76	91	122
Lift at Max. pressure (Kgs)	1488	2325	3347	5951
Max. pressure (Bar)	0.5	0.5	0.5	0.5
Height inflated (cm)	43	59	61	100
Height deflated (cm)	5	5	5	10
Air requirement (litres)	222	450	673	1900
Weight Packed Twin set (Kgs)	30	34	45	50



Dual Box Controller

art. nr. 8100.0410



Hoses 5mtr

art. nr. 8100.0283 (r) Red

art. nr. 8100.0283 (g) Green



Conform prEN 13731



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rescue bags

Sealing Plugs

Environmental pollution will be considerably reduced once the quality and maintenance of environmentally hazardous liquid flow systems are improved.

With these plugs, the leaking of hazardous substances from damaged pipelines and/or transport vehicles into the sewage system can be prevented in a very short time.

The design of the sealing plugs allows them to be inflated with compressed air: from a cylinder, compressor or by means of a hand or foot pump.

UTILITY

Sealing plugs are practically indispensable in the reconstruction of sewage systems, water and other pipelines.



Hose 10mtr
art. nr. 8100.1510

Single Controller
art. nr. 8100.1600



Regulator with hose 2mtr
art. nr. 8100.1620

DIMENSIONS

The standard dimensions of the sealing plugs are manufactured to fit canals and pipes with a diameter ranging from 100mm - 1200mm

EQUIPMENT

The application of a single plug requires a source of compressed air, a reduction valve with the possibility of regulating the pressure from 0-1,5 Bar, a 10m high-pressure hose with an inner diameter of 8mm and joining elements.

Art. number 8100.1000 8100.1005 8100.1010 8100.1020 8100.1025 8100.1026 8100.1030 8100.1110 8100.1120 8100.1130

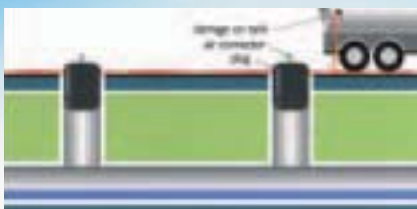
Type	Sealing plug									Gully
	100/200	150/300	200/400	300/525	350/600	375/750	500/800	500/1000	600/1200	
plug diameter (mm)	92	142	192	272	322	342	472	472	570	295
pipe diameter min. for plug	100	150	200	300	350	375	500	500	600	300
max. for plug	200	300	400	525	600	750	800	1000	1200	650
plug length total (mm)	535	575	635	675	865	1085	1185	1185	1800	550
weight (kg)	1,12	1,9	2,95	6	8,39	10,9	17,32	17,32	43	5
operating pressure max. (bar)	2,5	2,5	2,5	2,5	2,5	2,5	2,5	1,5	1	1,5

Art. number 8100.1400 8100.1403 8100.1405 8100.1410 8100.1411 810001412 8100.1415 8100.1420 8100.1421

Type	Bypass Plug								
	100/200	150/300	200/400	300/525	350/600	375/750	500/800	500/1000	600/1200
plug diameter (mm)	92	142	192	272	322	342	472	472	570
pipe diameter min. for plug	100	150	200	300	350	375	500	500	600
max. for plug	200	300	400	525	600	750	800	1000	1200
plug length total (mm)	550	590	635	675	865	1085	1185	1185	1800
weight (kg)	2,61	4,39	6,3	11,9	16,64	19,7	31,32	31,32	60
operating pressure max. (bar)	2,5	2,5	2,5	2,5	2,5	2,5	2,5	1,5	1,0
by-pass diameter (inch)	1"	1"	2"	2"	2"	2"	2"	2"	4"



Footpump with safety valve
art. nr. 8100.1605



Sealing of gutters during external spills of hazardous substances



Why 350 Bar?

Zumro B.V. dares once again to be different and has this scientifically grounded! In cooperation with several universities we have extensively tested, researched it over and over, eliminated all the other options and came to the conclusion that we had to choose a 350 Bar working pressure for our ResQ Tools. All results can be read in the report of the Delft University of Technology. The following conclusions were made:

- **between 350 Bar and 400 Bar is the most ideal working pressure;** pressures above 400 Bar will actually compress the hydraulic fluid causing stored energy which will be released during decompression what will transmit a high shock force (see report Shell oil). **What does this all mean for you as a user?** High impact of the material you are cutting. Undesirable and potential dangerous for you and the victim as pieces of steel bars are flying through the air during cutting.

- **at 350 Bar less heat is generated than at 700 Bar** $\frac{PV}{T} = C$

P= pressure
V= volume
T= temperature
C= constant

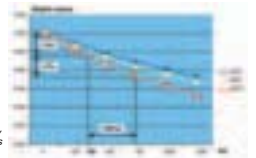
Compressibility of Mineral Oil

Pressure	Relative volume		
	10°C	40°C	100°C
0	1.000	1.000	1.000
250	0.989	0.986	0.981
500	0.978	0.974	0.966
750	0.969	0.964	0.953
1000	0.961	0.955	0.943
1250	0.953	0.947	0.933

The main criteria for our purposes were:

- **safety and durability**
- **easy handling and high performance**
- **low weight**
- **long life-span**

Source: Shell U.K. Oil Products Limited, Compressibility for all mineral oils



350 BAR



700 BAR

Note the difference in material thickness, thus extra weight

As both rescuers and victims come very close to rescue tools the safety factor is of high importance! Therefore we design hydraulic rescue equipment having a safety factor of 2:1 while the common factor used by other manufacturers is only 1,5:1. This design also enables our tools to cut impact free in order to minimize personal danger and stress associated with casualty extrication. Furthermore, the operating pressure of 350 Bar not only accomplishes this safety factor but also has a significant influence on the life-span of the equipment.

Another reason for working with 350 Bar is the decrease in weight of the tools. In the former days the industry demanded high working pressures. In order to meet this demand tools became larger, thus heavier and hoses also had to be stronger, thus thicker. This all had to lead to a higher safety factor. However, even with a working pressure of 350 Bar thus less heavy equipment it is not only a pleasure working with, the safety is also better guaranteed!

Zumro only manufactures rescue equipment for you!

Other manufacturers used to produce tools for the industry which work on higher pressures of 600 upto 800 bar. The pressure there seems to be not much of a consideration, but more a standardization.

MPS

As many companies still work with high pressure tools we have designed a system allowing our tools to be connected to any pressure, up to 720 Bar. This system is called: Multiple Pressure System (MPS).



The MPS is a By-pass system which can be set to a specific pressure, thus making the Rescue tools fully adaptable. Should the specific pressure be exceeded, the hydraulic fluid is directed into the return line via an over-pressure valve, which is augmented by a fail-safe back-up valve.

The MPS has proven to be a very effective way of controlling the flow, increasing the safety factor and creating full adaptability with alternative operating pressures:



350Bar - 630Bar - 720Bar

- **350 Bar is safer**
- **350 Bar – reduces weight of tools!**
- **350 Bar has less impact on equipment, thus increasing the life span!**
- **350 Bar means better handling and is more compact for easier storage!**

RES Q-TOOLS



ZUMRO
RES Q™
*innovative
for life!*

rescue sets

Ultra Light Frontliner Set

This set is extremely popular due to its compactness and ease of handling. Suitable for rapid intervention.



Art.no.: 2019.1501.00 Total weight: 100 kg

Ultra Light Set B	
Art.no.: 3029.6003	ResQ Mini Power Unit
Art.no.: 2019.2110	ResQ 190 Frontliner DIN
Art.no.: 2067.0000	ResQ Telescopic Ram
Art.no.: 2100.0790	Extension Set for Telescopic Ram
Art.no.: 2030.3000	ResQ Q-Cutter
Art.no.: 2601.7011	ResQ 10m hose green
Art.no.: 2601.7211	ResQ 10m hose orange
Optional:	
Art.no.: 2019.2150	ResQ 260 Frontliner DIN

Light Duty Set

A light duty set with an excellent performance and giving the operator more spreading capability than in the ultra light set.



Art.no.: 2019.1551.00 Total weight: 150 kg

Light Duty Set B	
Art.no.: 3079.5543	ResQ Mini/Maxi Honda MTO PU-integrated hose reel 2x20m
Art.no.: 2005.3010	ResQ 160 Frontliner DIN
Art.no.: 2067.0000	ResQ Telescopic Ram
Art.no.: 2100.0790	Extension Set for Telescopic Ram
Art.no.: 2030.3000	ResQ Q-Cutter
Art.no.: 2022.0000	ResQ 410 Frontliner DIN



rescue sets

Medium Duty Set

An example of a medium duty set for a wide range of applications. Combining the effectiveness of the ultra light set with the extra capability of the light duty set. A well balanced set for most occurring situations.

Art.no.: 2019.1601.00 Total weight: 200 kg

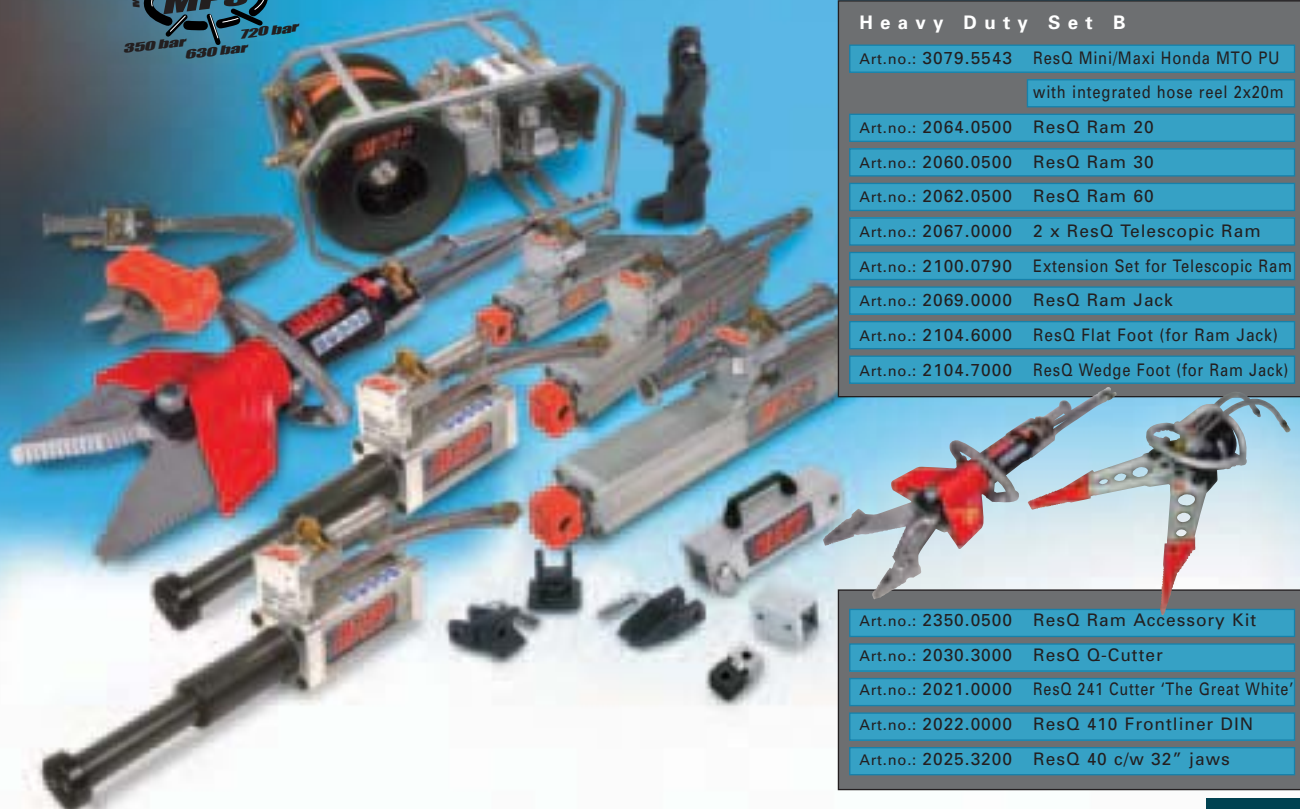
Medium Duty Set B

Art.no.: 3074.8243	ResQ Mini/Maxi 220V MTO PU +side mounted hose reel 2x20m
Art.no.: 2019.2110	ResQ 190 Frontliner DIN
Art.no.: 2067.0000	2 x ResQ Telescopic Ram
Art.no.: 2100.0790	Extension Set for Telescopic Ram
Art.no.: 2025.0000	ResQ 40
Art.no.: 2030.3000	ResQ Q-Cutter
Art.no.: 2021.0000	ResQ 241 Cutter 'The Great White'



Heavy Duty Set

A heavy duty set for all purposes! With this set, the rescuer can be confident to be able to tackle any task, whatever the situation may be.



Art.no.: 2019.1651.00 Total weight: 300 kg

Heavy Duty Set B

Art.no.: 3079.5543	ResQ Mini/Maxi Honda MTO PU with integrated hose reel 2x20m
Art.no.: 2064.0500	ResQ Ram 20
Art.no.: 2060.0500	ResQ Ram 30
Art.no.: 2062.0500	ResQ Ram 60
Art.no.: 2067.0000	2 x ResQ Telescopic Ram
Art.no.: 2100.0790	Extension Set for Telescopic Ram
Art.no.: 2069.0000	ResQ Ram Jack
Art.no.: 2104.6000	ResQ Flat Foot (for Ram Jack)
Art.no.: 2104.7000	ResQ Wedge Foot (for Ram Jack)

Art.no.: 2350.0500	ResQ Ram Accessory Kit
Art.no.: 2030.3000	ResQ Q-Cutter
Art.no.: 2021.0000	ResQ 241 Cutter 'The Great White'
Art.no.: 2022.0000	ResQ 410 Frontliner DIN
Art.no.: 2025.3200	ResQ 40 c/w 32" jaws

Note: All indicated sets are available either with:

Bio Fluid, ResQ Fluid or Mineral Fluid. This fluid must be ordered separately. Flat Face Connectors are optional available.

(F.A.Q.)

Frequently Asked Questions (F.A.Q.)

AS A RESCUER, WHEN DO YOU NEED THE GREATEST SPREADING FORCE?

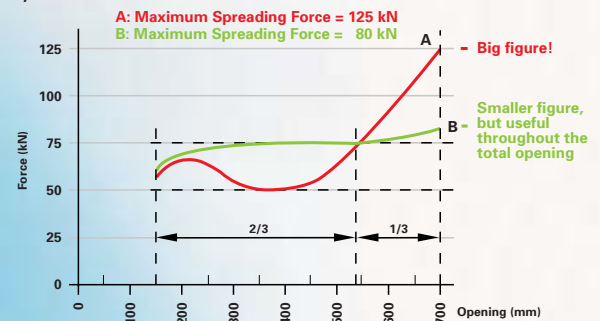
In order to spread out the door, you have to try to put the tips of the spreader between the door. This is very hard as the door is closed and you only have a very small gap to put the tips of the spreader in. Therefore you only have got the 25mm of the tips where you can use the force. If the door is partly opened then the job can be done easily and no big forces are needed as the hinges are broken.

When do you need the greatest force?

- When the spreader is at its largest spreading opening? (Graph A)
- Have a constant force throughout the whole spreading opening? (Graph B)

Your experience will confirm answer B. It is a known fact, that the greatest spreading force is needed up to approximately 2/3 of its opening. At this point, the metal starts to tear and the spreading becomes easier.

The comparison graph indicates the advantages of having the maximum spreading force during the first 2/3 of the opening, and not during the last 1/3 of the movement.

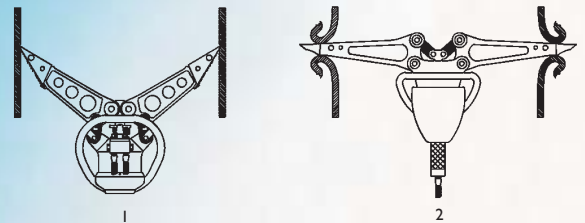


This drawing indicates that should the ResQ spreader (1) have the same opening angle as the other spreading arm (2), it would even have a bigger opening, BUT it becomes less operable, as is the case with the spreading arm linked on the inside (2). Other spreaders have shorter arms, and try to compensate their shortcomings by increasing the angle.

Another advantage is that the Zumro spreader will stay in its position, because of the largest spreading opening of 700 mm. Other spreaders have a bigger spreader opening (800 mm) and you might think this is better. It is not, as the bigger opening causes the rescuer being pulled to the vehicle which can be very dangerous. (See figure 1)

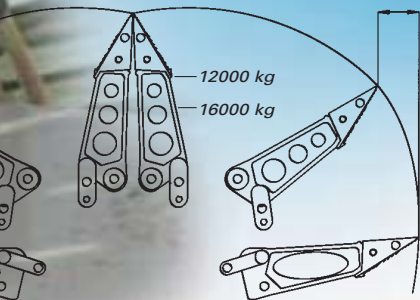
The largest spreading opening is only relevant when the working angle is effective!

Note: The secret to an operable angle when using a spreader, is the position of the articulating links on the spreader arms. With the links on the outside (ResQ Spreaders) a big opening is created and it keeps the angle operable. As can be seen, when the links are on the inside of the arms, the opening-angle becomes too big; the tool and operator will be pulled toward the vehicle and the tips are piercing and not spreading anymore.



(1) spreader stays in position (opening e.g. 700 mm)

(2) spreader pulls the rescuer to the vehicle due to an opening too large (e.g. 800 mm)



Note: As any experienced rescuer would confirm, a spreader is only operable within certain spreading angles of the jaws. The above figure clearly indicates that a big angle is not the ultimate, as the tips of the spreader start to pierce through the material and pulls the tool and operator towards the danger zone.

In retrospect:

1. Do not be misled by the maximum spreading force only, demand a spreader that can safely do the job at openings you have to deal with in real situations.
2. A maximum opening is only relevant if it can be utilized, not if the tips are piercing the material and if any bigger opening angle relates to little or no effective spreading.

Comparing the operational angles of spreaders

"Demand effective tools, do not be misled by big figures only!"

WHAT CAUSES THE RESQ CUTTERS TO BE IMPACT-FREE?

The most important feature of a good all-around cutter is the ability to cut through all kinds of material that a rescuer would be confronted with in his/her job. Furthermore, to ensure the safety of the operator, we have designed new cutting blades that guarantees impact-free cutting.

In the process of optimizing a blade, one should consider what happens during the cutting action. Besides the cutting edge of the blade, the shape and contours are especially important. Mostly oval shaped blades are being used for cutters, but they tend to cause significant reactions during cutting:

- Due to the shape, the object that has to be cut centers itself in such a way as indicated in figure 3. As the outer edges of a blade corresponds to smaller forces being transferred, the maximum cutting force is established by the furthest point of contact.
- Due to the bracing of the object to be cut by the blades, enormous amounts of potential energy are developed before actual cutting is accomplished. Thus, causing severe reaction forces to be released during the cutting process.
- It is not surprising that blades often fail under these circumstances due to twisting and turning of the tool, leaving the rescuer with 'empty' hands in an emergency situation.

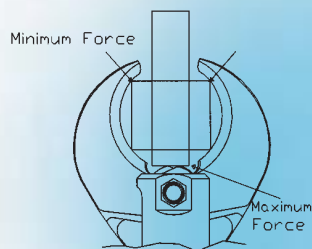
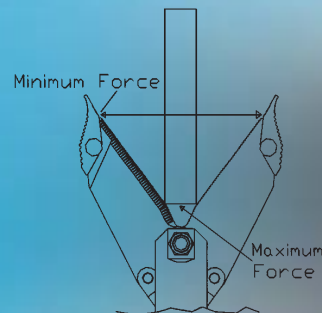


Figure 3:
Due to the lower cutting forces at the tips of the blades, the maximum useable cutting force is thus determined by this position.

As these oval blades cause reactions during cutting, we have improved the design of the cutting edge and shape of the ResQ blade. This unique design has the following advantages:

- By creating a blade that transfers optimum cutting forces, the cutter can be positioned in such a way that the maximum forces can be transferred at all times.
- Instead of snapping through the material, the purposely designed shark teeth shear through the material without the display of reaction forces.
- As mentioned earlier regarding the power-curve of the spreaders, it is also important to select cutters showing a high cutting force at a big cutting opening.
- The shark teeth bite firmly in the material and avoid sliding.



Why are the forces of spreaders and cutters higher?

All tools are optimized and improved this resulted in a higher capacity which you can find in this catalogue.

(F.A.Q.)

Frequently Asked Questions (F.A.Q.)



Figure 5: Eccentric loads on a ResQ Ram

WHAT SAFETY FEATURES OF THE RESQ RAMS MAKE THEM THE SAFEST ON THE MARKET?

The most important feature of ResQ Tools is a safe working environment as rescuers are dealing with so many different situations. This ultimate safety is guaranteed because of the following accents in the design:

- The cylinder of the Ram operates reliably in situations where eccentric forces are encountered (see figure 5).
- The surface area of the Ram jaws enables placement in eccentric situations.
- The length of the various sizes of ResQ Rams can be adapted to the space created with different spreaders, presenting a complete interchangeable system.



WHY DO WE USE THUMB CONTROL VALVES ON OUR TOOLS?

We applied the thumb control valve for safety reasons. The thumb control is separate from the carrying handle, so when the handle is damaged you can still use the control valve.

WHAT HAS ZUMRO DONE TO BE PREPARED FOR NEW CAR CONSTRUCTIONS NOW AND IN THE FUTURE?

Zumro ResQ introduced the conflex blades in the 1980's. Then already stating that all others would follow. Why?

At that time Zumro already analyzed cutting and came to the conclusion that conventional blades (curved blades) are not the solution. Most competitors only increased the force. Now more and more following our lead. Why?

The higher the resistance the higher the required pressure. The higher the pressure the more stored energy you have. This results in a very strong impact, which you do not want, as stronger impact means materials that you are cutting can shoot out dangerously, as we discussed on page 21. The manufacturers of high pressure tools understand this and thus do not discuss it.



figure 1



Now other competitors start to realize this and start to explain this.

A lower pressure, e.g. 220 bar, allows you to cut with less stored energy. As our complete hydraulic system is designed for 350 bar and not for high pressure, we even are able to cut the new car construction materials at approx. 100 bar.

Below and above you see examples of A-, B-, and C station-post of a new Volvo. All posts are consisting of various hollow tubes. After extensive testing the results were clear. The conplex blades, designed for all our cutters, cut the material very smoothly in comparison with curved blades squeezing through the material and causing major impact. Our blade design therefore gives you the maximum capability to cut those reinforced constructions and above all: impact-free!

It is already clear to us that in the next generation more and more composite will be used in car constructions. Our present equipment is already capable to do this!

figure 2



figure 1: Side impact bar; can be made of micro-alloy steel or Boron steel.

figure 1: B-Post; can be made of HSLA steel to reinforce roof and body of a vehicle.

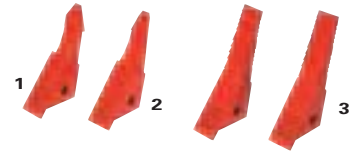


figure 2: The bar in the crushable zone can be made of micro-alloy steel or Boron steel.



spreaders

ResQ 40



AIRCRAFT JAWS

821MM/32" JAWS

1 art. nr. 2150.0251

2 art. nr. 2150.0261

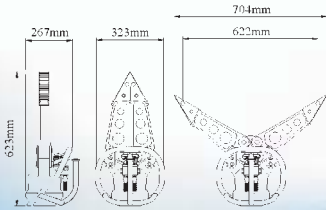
3 art. nr. 2140.0040

A powerful, streamlined 702mm spreader with a unique handle design for superior balance so you can get to the tight spots.

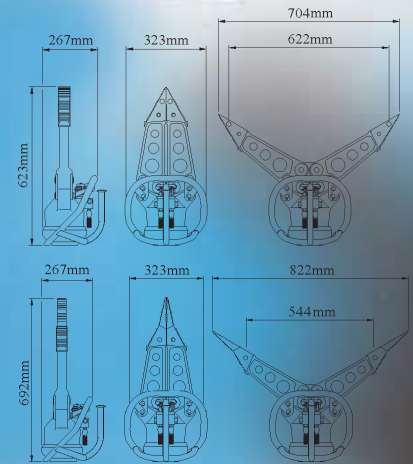
Once there, it gives you the muscle to get the job done quickly!

Add our newly designed tips and you get a powerful, lightweight, streamlined 822mm spreader. Squeezing force: 109 kN

The flat base enables the operator to support the tool with the upper part of the leg, less weight to carry.



art. nr. 2305.5000
CHAIN AND SHACKLE SET
for ResQ40 and ResQ50



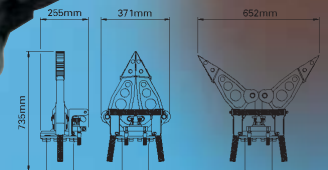
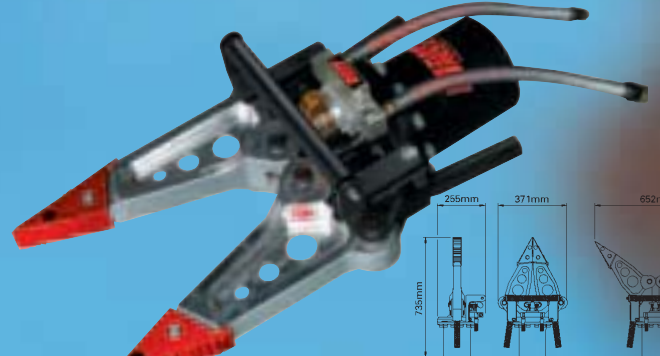
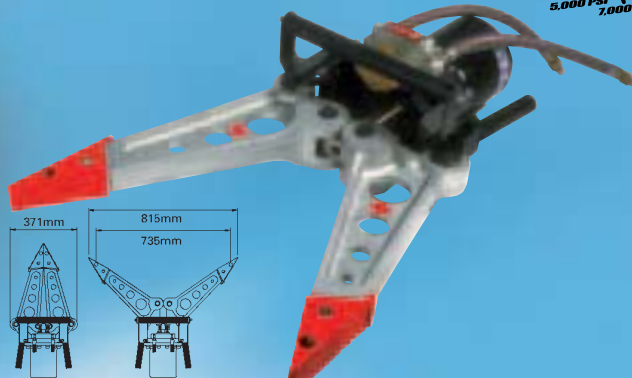
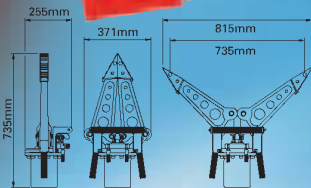
RESQ 40/32" jaws

This 32" spreader is the epitome of power and effectiveness. It boasts the greatest effective force of any tool currently available. Heavy duty, yet a surprisingly lightweight tool. It will tackle the toughest of jobs.

ResQ 50



ResQ 65



prEN 13204

art. nr. 2025.0000

art. nr. 2025.3200

art. nr. 2050.0000

art. nr. 2065.0000

Dimensions	Res Q 40	Res Q 40 32	Res Q 50	Res Q 65
Length	623 mm	692 mm	735 mm	735 mm
Width	323 mm	323 mm	371 mm	371 mm
Height	267 mm	267 mm	255 mm	255 mm
Weight	20,5 kg	21,5 kg	25 kg	26.3 kg
Max. opening	704 mm	822 mm	815 mm	652 mm
Max. spreading force (a)	187.3 kN/19.1 ton/21.0 US ton	187.3 kN/19.1 ton/21,0 US ton	123.8 kN/13 ton/14 US ton	255 kN/27 ton/29 US ton
Max. spreading force (b)	51,5 kN/5,2 ton/5,8 US ton	40.8 kN/4.4 ton/4.80 US ton	72.1 kN/7 ton/8 US ton	65 kN/7 ton/7.3 US ton
Max. pulling force	65.9 kN/6.7 ton/7.4 US ton	n/a	83.3 kN/8.5 ton/9 US ton	83.3 kN/8.5 ton/9 US ton
Max. pulling opening	622 mm	n/a	735 mm	n/a

DIN 14751 SP-30 TÜV SP27-92-TP18
Conform CEN NF S 61-571

AS 35/822-21,5

DIN 14751 SP-45 TÜV SP22-89-TP18
Conform CEN NF S 61-571

AS 60/650-26

(a) base of jaws

(b) 0.98" from the tips of the jaws

AS 40/704-20

BS 50/815-25

The ResQ 80 spreader is available should extreme situations occur.



Res Q is a trade mark of ResQ.Tek, Inc. and Zumro B.V., a Dutch corporation with over 30 years of experience in the development, refinement and application of emergency products. All products in the Res Q program, are supplied to you throughout our carefully selected dealer organizations, assuring you of expert service and assistance.



c u t t e r s

RESQ 100

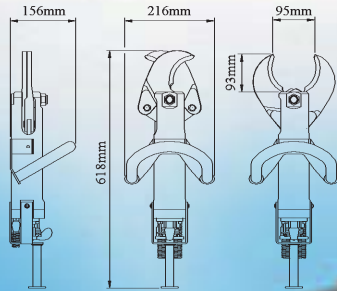


OPTIONAL ROTATING GRIP

art. nr. 2130.5000

For those who prefer a rotational grip, and for easy operation. The optional rotating grip can be removed to allow operation with standard trigger valve for more precise control.

Lightweight cutter equipped with conventional crescent blades with a weight of only 10 kg. The blades are designed for cutting, e.g. through door-posts.



prEN 13204 AC 95D-10

DIN 14751 S-90 TÜV S 17-89-TP18
Conform CEN NF S 61-571

art. nr. 2005.1000

RESQ 100 Dimensions

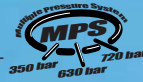
Length	618 mm
Width	216 mm
Height	156 mm
Operational weight	10 kg
Maximum opening	103 mm
Maximum cutting force	227 kN / 23.1 ton / 25,5 US ton
Round bar/Flat bar	ø20 mm / □ 70x8 mm

• **incredible lightweight cutter**

• **protective cover over articulating surfaces**

• **the grip and trigger valve are separated for precise control**

RESQ 160



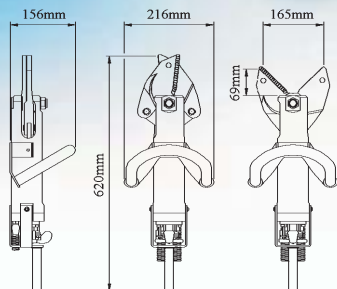
The advanced blade design enables you to cut impact free. High impact cutting is undesirable as it can cause an unpredictable, and potentially dangerous, flying-away of metal pieces during the cutting action.



prEN 13204 AC 87F-9.8

DIN 14751 S-90 TÜV S 32-92-TP18
Conform CEN NF S 61-571

art. nr. 2015.2010



The blades have special engineered shark teeth for a perfect grip and impact-free cutting

RESQ 160 Dimensions

Length	620 mm
Width	216 mm
Height	156 mm
Operational weight	9.8 kg
Maximum opening	165 mm
Maximum cutting force	216 kN / 22.0 ton / 24.3 US ton
Round bar/Flat bar	ø24 mm / □ 80x8 mm

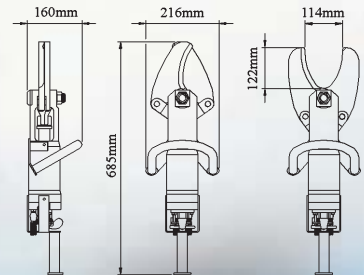
medium and heavy duty cutters

RESQ 120

A very lightweight medium duty cutter. Ideal for cutting cylindrical and flat surfaces. Manufactured, as our whole range of tools, from lightweight anodised extruded aircraft aluminium.

Conform CEN NF S 61-571

AC 127E-13

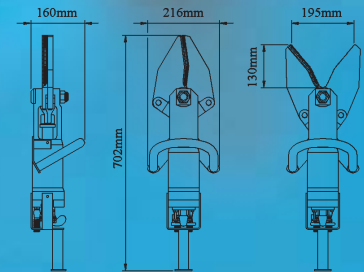


RESQ 190

The most popular cutter built to the highest quality standards specifically designed to meet the demanding requirements of the professional rescuer.

Conform CEN NF S 61-571

BC 169H-13

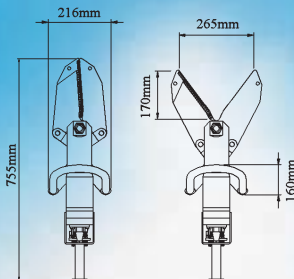


RESQ 260

The ResQ 260 is unsurpassed in its characteristics, and it has the biggest possible opening of all cutters in the industry. The thumb-trigger allows accurate control of the tool and also incorporates a dead-man valve.

Conform CEN NF S 61-571

CC 227H-15



Conform CEN

CC 215H-15

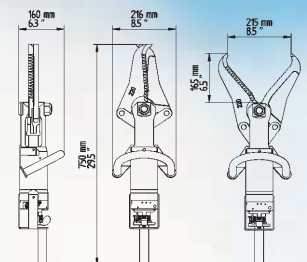
RESQ 220

The curved tips allow you to grab around the new car construction A and B post in one clean cut. Excellent performance and opening.



prEN 13204 art. nr. 2019.2000 art. nr. 2019.2010 art. nr. 2019.2050 art. nr. 2019.2030

Cutters	ResQ 120	ResQ 190	ResQ 260	ResQ 220
Length	685mm	702mm	755mm	750mm
Width	216mm	216mm	216mm	216mm
Height	160mm	160mm	160mm	160mm
Operational weight	12,7kg	12.9 kg	14.2 kg	14.2 kg
Max. cutting opening	120mm	195mm	265mm	215mm
Max. cutting force	292kN/29.8ton/32.8US ton	326kN/33.2ton/36.6US ton	326kN/33.2ton/36.6US ton	326kN/33.2ton/36.6US ton
Round bar/Flat bar	ø22mm / □ 50x5mm	ø30mm / □ 110x10mm	ø30mm / □ 110x10mm	ø30mm / □ 110x10mm



Res Q is a trade mark of ResQ Tek, Inc. and Zumro B.V., a Dutch corporation with over 30 years of experience in the development, refinement and application of emergency products. All products in the Res Q program, are supplied to you throughout our carefully selected dealer organizations, assuring you of expert service and assistance.

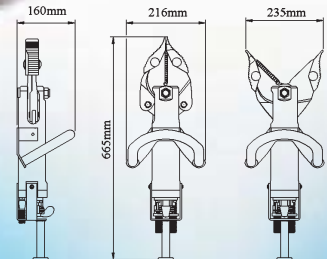
RESQ 160 Frontliner



The ResQ 160 Frontliner is the lightest combination spreader/cutter available in the world. A compact and balanced design makes it very easy to handle, during tough jobs. Easily cuts steel plating and pedals.

DIN 14751 S-90 TÜV SP32-92-TP18
Conform CEN NF S 61-571

prEN 13204 AK 18/214-F-11,5



RESQ 190 Frontliner

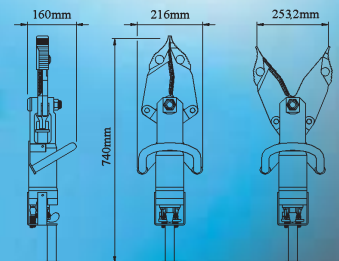


This medium tool is manufactured to the highest quality standards to meet the professionals needs. This dual-purpose tool has quick hand-removable tips for superior cutting operations in tight areas.

Conform CEN NF S 61-571

prEN 13204 AK 31/235-H-14

Fixed tips will only block your cutting action especially at c-posts



art. nr. 2310.5000

Chain and shackle set for ram/combi

RESQ 260 Frontliner

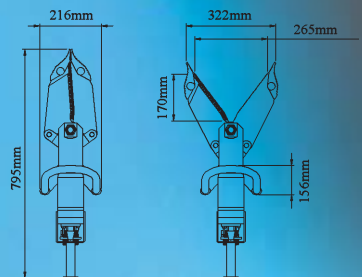


The supreme characteristics of this advanced tool, result from its high-tech design. In many ways the flagship of the Frontliners. All Frontliners are also available with integrated fixed-jaw blades

Conform CEN NF S 61-571

prEN 13204 AK 25/310-H-15

All Frontliners are also available with integrated fixed-jaw blades



art. nr. 2005.3010

art. nr. 2019.2110

art. nr. 2019.2150

Frontliners	Res Q 160 Fr	Res Q 190 Fr	Res Q 260 Fr
Length	665mm	740mm	795mm
Width	216mm	216mm	216mm
Height	160mm	160mm	160mm
Operational weight	11,5 kg	14 kg	15.3 kg
Max. cutting opening	165mm	195mm	265mm
Max. cutting force	216kN/22.0ton/24.3US ton	326kN/33.2ton/36.6US ton	326kN/33.2ton/36.6US ton
Round bar/Flat bar	ø24mm / □ 80x8mm	ø30mm / □ 110x10mm	ø30mm / □ 110x10mm
Max. spreading opening	235mm	253.2mm	322mm
Max. spreading force	144kN/14.7ton/16.2US ton	99.5kN/10.1ton/11.2US ton	57.5kN/5.9ton/6.5US ton
Max. spread.force tips	30.1kN/3.1ton/3.4US ton	37.4kN/3.8ton/4.2US ton	30kN/3.1ton/3.4US ton
Max. pulling force	29kN/3.0ton/3.3US ton	37kN/3.8ton/4.2US ton	29.8kN/3.0ton/3.3US ton
Max. pulling opening (a)	288.4mm	302mm	375mm
Max. spreading opening (b)	350mm	343mm	418mm

(a) with pulling jaws (b) with duck spread -/pulling jaws



All Frontliners, with removable tips, are suitable with pulling jaws for chain and shackle.

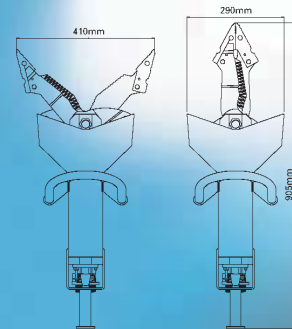
art. nr. 2130.0130

heavy duty combi-tools

serie Great White: **RESQ 410**



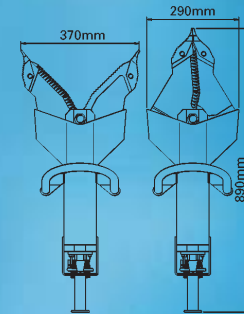
Combines the best characteristics of cutting and spreading into one tool that is as easy to use as it is versatile. Lightweight and easy to control, you are ready to cut, pry, spread, squeeze, and pull quickly and effectively. This tool is the world's strongest combi-tool with a spreading power up to 144 kN.



serie Great White: **RESQ 370**



The ResQ 370 Frontliner has a possibility of attaching the detachable jaws so that it can become a spreader as well. The 370 Frontliner has a spreading capacity up to 14.1 US ton and makes it an ideal combi tool for the new car constructions. The maximum cutting force is 59 US ton.



art. nr. 2022.0000

art. nr. 2022.4000

Dimensions	Res Q 410	Res Q 370
Length	905 mm	890 mm
Width	290 mm	290 mm
Height	170 mm	170 mm
Operational weight	20,4 kg	19.7 kg
Maximum opening	410 mm	370 mm
Nominal pressure	350 bar	350 bar
Max spreading force (a)	144 kN/14,7 ton	125.8 kN
Max spreading force (b)	84 kN/8,6 ton	72.8 kN
Maximum cutting force	489 kN/39,7 ton/43,7 US ton	525.4 kN/53.5 ton/59 US ton
Round bar/Flat bar	ø30mm/ □110x10 mm	ø40mm/ □120x15 mm
Max. pulling opening	265 mm	n/a
Maximum pulling force	69,9 kN/7,1 ton	n/a

prEN 13204 CK 35/410-H-20,4

prEN 13204 CK 35/370-H-19,7

(a) base of jaws (b) 25 mm from tip of jaws

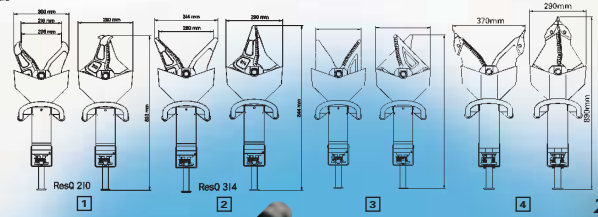


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heavy duty cutters serie Great White

4 options for blade configuration:

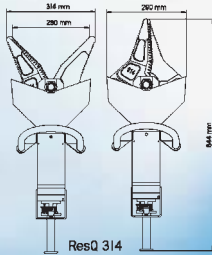
- 1 ResQ 210: A more conventional option
- 2 ResQ 314: A greater opening optimization of force
- 3 ResQ 241: Cross-over blades for continuous cutting
- 4 ResQ 370: Frontliner configuration



The Great White is especially designed for cutting through vehicle side impact bars. Also, the new composite materials and other safety reinforcements in today's automobile will not survive the firm bite of "The Great White". The equipment conforms to prEN 13204.

The Great White cutter can cut through 40 mm round hot rolled bar conforming to prEN material specifications.

serie Great White: ResQ 314



59 tons

"the great white" series



can your gear cut it?

serie Great White: ResQ 210

The ResQ 210 Cutter has a maximum cutting force of 59 US ton. The curved tips allow you to grab around the bigger B and C Posts, used in new car constructions and cuts these posts in One cutting action.

art. nr. 2022.2000

art. nr. 2022.3000

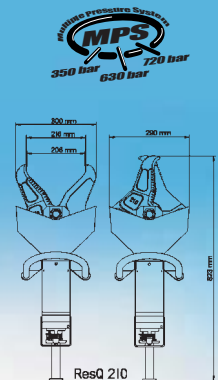
art. nr. 2021.0000

Dimensions	ResQ 210	ResQ 314	ResQ 241
Length	823 mm	844 mm	815 mm
Width	280 mm	290 mm	290 mm
Height	170 mm	170 mm	170 mm
Weight	17,9 kg	17.9 kg	18.5 kg
Max. opening	206 mm	314 mm	240 mm
Pressure	350 bar	350 bar	350 bar
Cutting force	525.4 kN/53.5 ton/59 US ton	525.4 kN /53.5 ton/59 US ton	493kN/50.3 ton/55.4 US ton
Round bar/Flat bar	ø40mm / □ 120x15 mm	ø40mm / □ 120x15 mm	ø35mm / □ 120x12 mm

prEN 13204 CC 206H-17,9

prEN 13204 CC 205H-17,9

prEN 13204 CC 203H-18,5



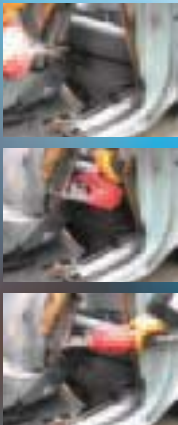
c u t t e r s

RESQ Q-Cutter / Door Opener

The NT ResQ Q-Cutter is a small compact cutter with a semi-remote thumb-control and a head which articulates 180 degrees. This cutter is great for those tight, hard-to-reach, places and is perfect for seat frames and pedals. The Q-cutter was designed to reach within confined spaces to the same extent as one would be able to reach with your fist. This tool can also be ordered to operate on ANY hydraulic pressure system as with all our equipment.



Suitable for use with other hydraulic rescue equipment (Multiple Pressure System) See page 16.



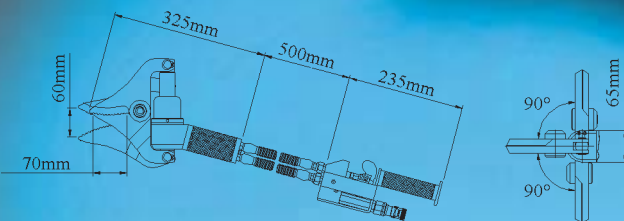
prEN 13204 AC 60/B-6.8

DIN 14751 section 1&11
Conform CEN NF S 61-571

art. nr. 2030.3000

RESQ Q-Cutter Dimensions

Length	325 mm
Width	218 mm
Height	65 mm
Operational weight	6,8 kg = 4,5+2,3
Maximum opening	60 mm
Maximum cutting force	150 kN / 15.3 ton / 16.9 US ton
Round bar/Flat bar	ø18 mm / □50x6 mm
Max. spreading force	36.9 kN / 3.8 ton / 4.1 US ton



ResQ Door Opener



- Ideal to open shutter from shop in case of fire;
- Suitable for underwater operation;
- Supplied with 2 mtr. hose (optional with Zumro's unique drip free flat face couplings);
- Single acting unit cylinder is fitted with spring for return.

art. nr. 2064.100M.BS

ResQ Door Opener Dimensions

Length	200 mm
Width	130 mm
Height	110 mm
Weight	5.5 kg
Maximum spreading force	111 kN
Maximum stroke	76 mm
Maximum working pressure	700 bar



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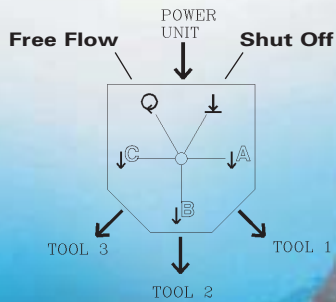
Selector Block

RESQ Selector Block

art. nr. 2095.0000

The ResQ Selector Block gives you the ability to connect up to 3 tools and operate the tool of your choice.

It is easy to operate and greatly increases the versatility of your power unit.



Our hoses have a safety factor of 4:1. To ensure safety, they are equipped with anti-kink coil springs. Available in green and orange.

Standard lengths

art. nr. 2601.6011	5 mtr
	10 mtr
art. nr. 2601.8011	15 mtr
	20 mtr
	art. nr. 2601.9011

Special lengths upon request



Standard Couplings

art. nr. 2600.0010



Flat Face Couplings

art. nr. 2600.0005



700Bar Couplings

art. nr. 2600.0015



630Bar Couplings

art. nr. 2650.6030



350Bar Mineral Couplings

art. nr. 2600.0025



630Bar Couplings

art. nr. 2650.6027



HP Flat Face Connectors

art. nr. 2605.3005

- Again the first •
- Any other connector obstructs the operation as you all have experienced because it is not connectable •
- Sand can be removed by wiping by the hand •
- Truly flat face •

Note: other couplings available on request

r a m s

RESQ Rams

The ResQ Rams are high precision machined tools of which the cylinder assemblies are extruded from aluminium. They are compatible with any hydraulic pressure system, e.g. (700 Bar).

The ResQ Rams are designed to create an extension capability that overlaps at the maximum opening. This feature enables the Ram 30 to take over from the Ram 20, and the Ram 60 from the Ram 30.

RESQ Ram 20

art. nr. 2064.0500

DIN 14751 TÜV RZ7-92-TP18 R102/218-12
Conform CEN NF S 61-571

prEN 13204 R 102/218-12



RESQ Ram 30

art. nr. 2060.0500

DIN 14751 TÜV RZ8-92-TP18 R102/367-15
Conform CEN NF S 61-571

prEN 13204 R 102/367-15

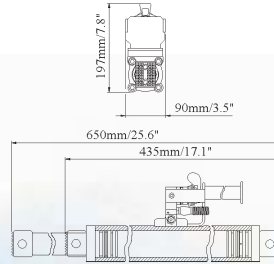
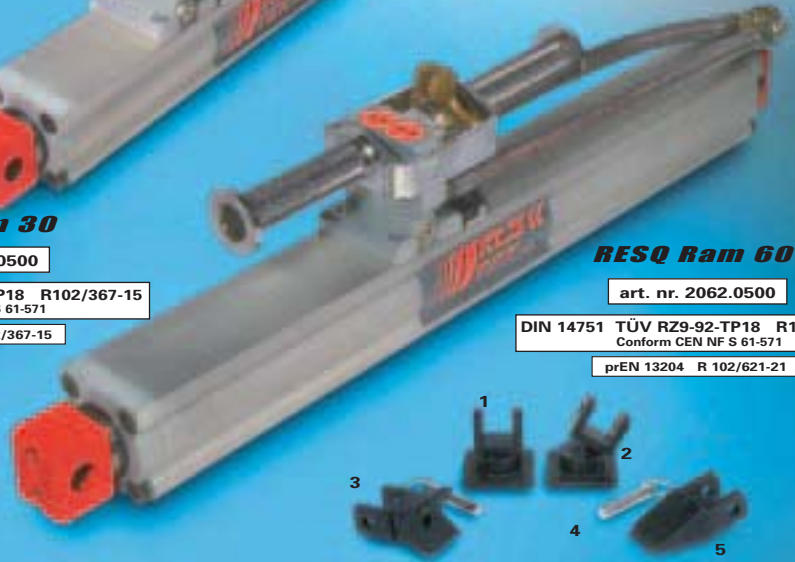


RESQ Ram 60

art. nr. 2062.0500

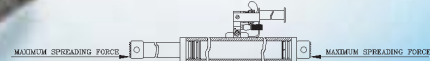
DIN 14751 TÜV RZ9-92-TP18 R102/621-22
Conform CEN NF S 61-571

prEN 13204 R 102/621-21



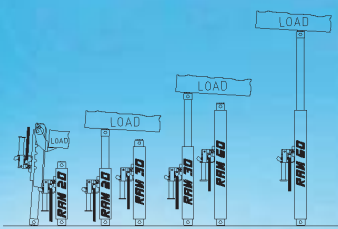
art. nr. 2100.0790

To optimise the versatility, an extension set is available to increase the maximum stroke.



32

ZUMRO RESQ TOOLS



The Ramjack is the perfect accessory with our Ram 20, converting it into a multi-purpose jack, also to enlarge confined spaces to insert airbags.

Ramjack

art. nr. 2069.0000

Flat Foot

art. nr. 2104.6000

Wedge Foot

art. nr. 2104.7000



As the Ramjack is used in combination with our Ram 20, it has a vertical lifting capability of up to 10 000 kg even if only a 10mm gap is available. At its maximum lifting height, the Ram 30 and Ram 60 can be utilised to increase the lifting height up to 1,5m.

art. nr. 2350.0500 art. nr. 2350.0510

Ram Accessory Kit		European	American
1 Fixed Base Plate	Larger surface area	-	X
2 Swivel Base Plate	Larger surface area	X	-
3 V-Block	Steer round objects	X	X
4 Shackle Pins	To secure attachments	X	X
5 Wedge	To separate or stabilise	X	X

art. nr. 2064.0500 art. nr. 2060.0500 art. nr. 2062.0500

Res Q Rams	Ram 20	Ram 30	Ram 60
Length	435mm	583mm	830mm
Width	90mm	90mm	90mm
Height	197mm	197mm	197mm
Operational weight	12,1 kg	15,1 kg	21,0 kg
Extended length	650mm	948mm	1445mm
Max. stroke	215mm	365mm	615mm
Spreading force	102kN/10.40ton/11.46US ton	102kN/10.40ton/11.46US ton	102kN/10.40ton/11.46US ton
Pulling force	33kN/3.36ton/3.71US ton	33kN/3.36ton/3.71US ton	33kN/3.36ton/3.71US ton

art. nr. 2305.5000 Also available: Chain and shackle set for Ram/ResQ40 + ResQ50



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ram s

Compact design of control valve allows you to reach confined spaces and the square base of the zumro rams gives you a solid base to handle

Telescopic Ram

We have developed the very first extendible telescopic ram, which is the perfect all-in-one ram. The precision compact design enables it to extend any length in combination with the optional extension set.



Ram Support art. nr. 9340.0007

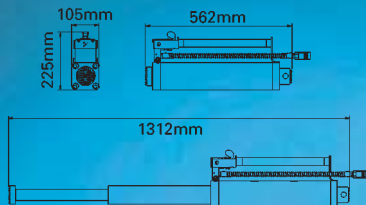


Telescopic Ram 30

prEN 13204 TR 176/160-67/186-13,7

Telescopic Ram 50

prEN 13204 TR 176/393-67/357-23,5



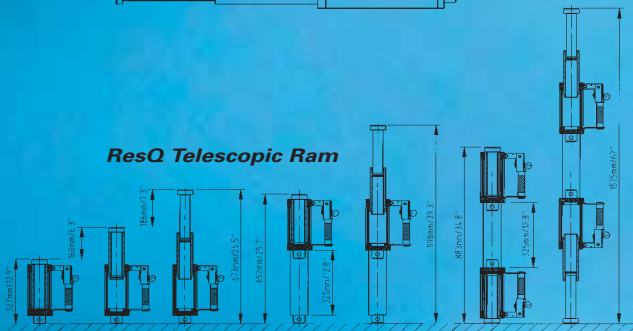
art. nr. 2100.0790

- ResQ Ram Extension Kit:**
- 115mm Connection Tube -
 - 195mm Extension Tube -
 - 325mm Extension Tube -
 - 2 x pin -
 - Ram Extension Foot -



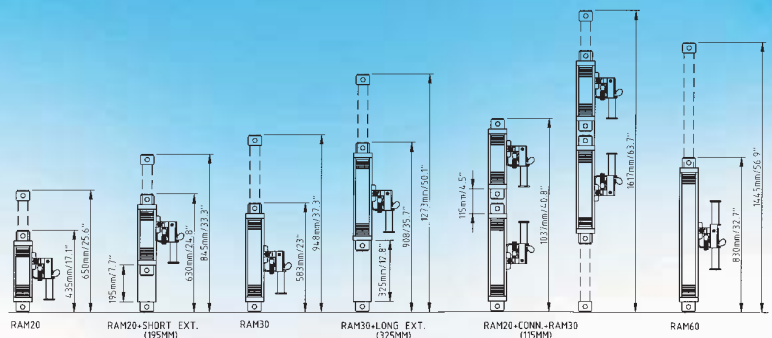
Two telescopic rams can be connected via an Extension Tube 325mm (1) or a Connection Tube 115mm (2) or Extension Tube 195mm (3), which allows for even greater spreading distances. The Ram Extension Foot (4) is also used in combination with the Ram Accessory Kit.

ResQ Telescopic Ram



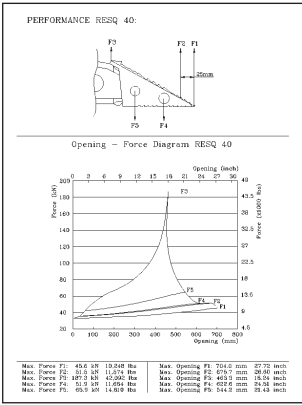
art. nr. 2067.0000 art. nr. 2069.0000

ResQ Telescopic RAM 30	RAM 50	
Length	327mm	562mm
Width	105mm	105 mm
Height	225mm	225 mm
Operational weight	13.7 kg	23.5 kg
Extended length	673mm	1312 mm
Max. stroke	346mm	750 mm
Spreading force (first stage)	176kN/19.94ton/19.78US ton	176kN/19.94ton/19.78US ton
Spreading force (second stage)	67kN/6.83ton/7.53US ton	67kN/6.83ton/7.53US ton

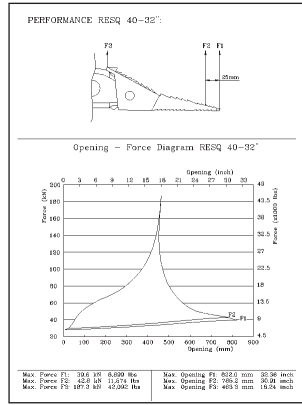


- ultra lightweight
- very small package
- connectable
- one ram that does it all
- perfect for limited storage space
- high load capacity

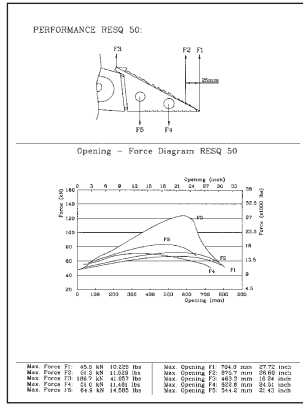
Power Curves



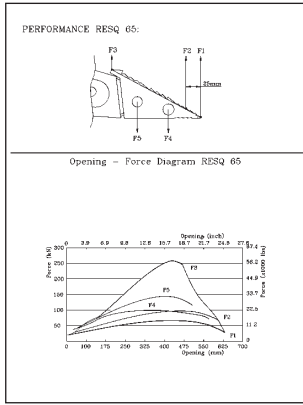
ResQ 40



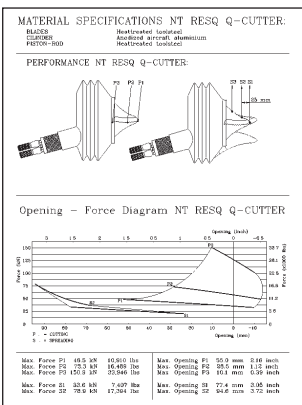
ResQ 40 32"



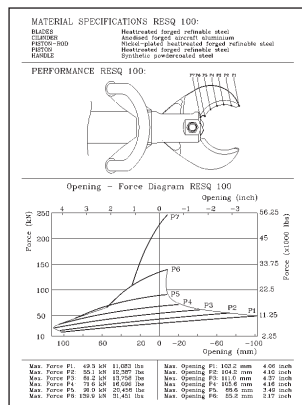
ResQ 50



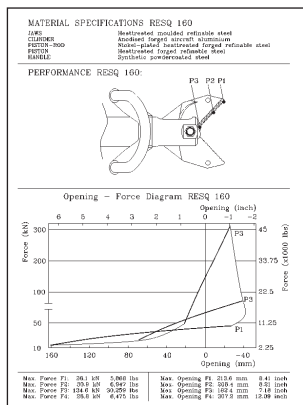
ResQ 65



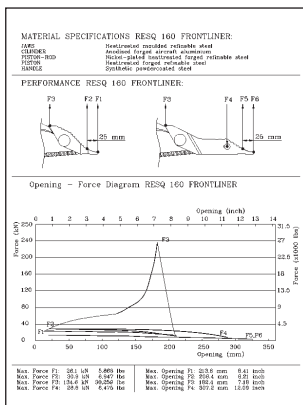
ResQ Q-Cutter



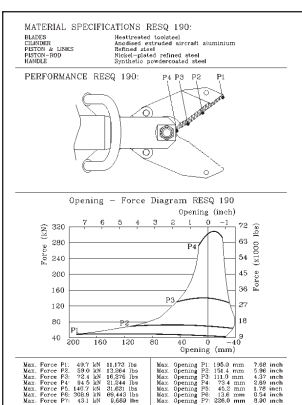
ResQ 100



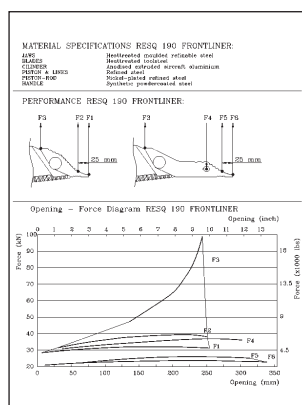
ResQ 160



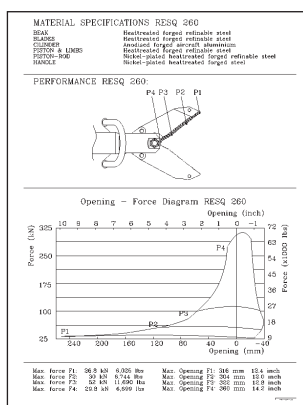
ResQ 160 Frontliner



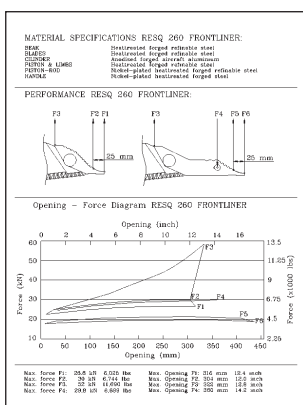
ResQ 190



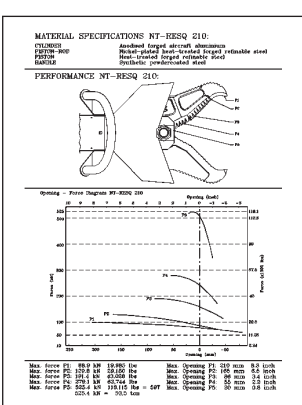
ResQ 190 Frontliner



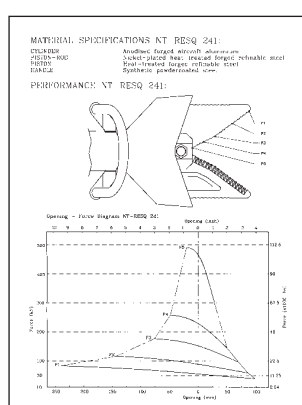
ResQ 260



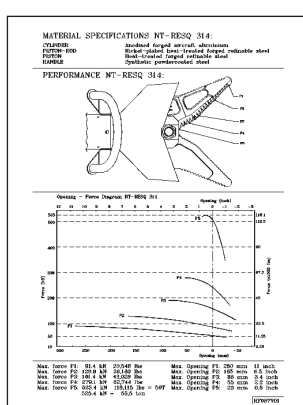
ResQ 260 Frontliner



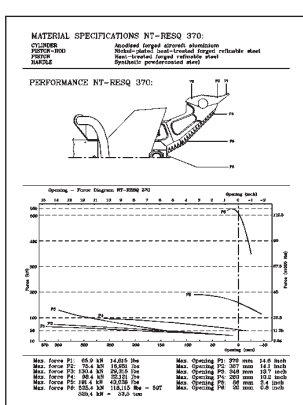
ResQ 210



ResQ 241



ResQ 314



ResQ 370 Frontliner



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RES Q-POWER UNITS



ZUMRO
RES Q™
innovative
for life!

power units
RESQ Mini/Maxi



**The lightest Power Units
in the market**

art. nr. 3079.5043

The Mini/Maxi Power Unit is a lightweight horizontal unit with a maximum performance that operates either one, or two tools simultaneously, without loosing capacity or speed of operation.

A dual piston pump system gives the power unit unsurpassed capabilities.



Optional 20m hose reels mounted on each side makes for a compact, complete package of hose reels and power unit.

art. nr. 3079.5043

**ResQ Mini/Maxi
Honda MTO power unit
model shown.**

Also available with either 110V or 220V electric motor.

Note: A fluid level indicator as a means of safety

Optimum design for maximum operable hydraulic fluid.

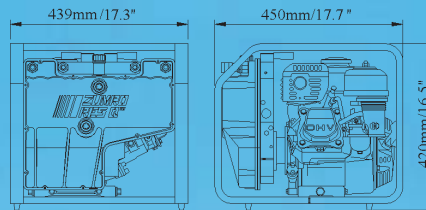


The position of the connectors of the ResQ Power Unit is for quick and easy operation.

Fluid level indicator on all units



**ResQ Mini/Maxi
Honda Triple Simultaneous**



Conform prEN 13204	art. nr. 3079.5043	art. nr. 3079.4023	art. nr. 3079.9033
	Mini/Maxi Honda	Mini/Maxi B&S	Mini/Maxi Triple
Pump	2-stage radial piston	2-stage radial piston	2-stage radial piston
Oil capacity	3,0 ltr	3,0 ltr	8.0 ltr
First stage; flow	0-100bar; 3.8 ltr/min	0-100bar; 3.8 ltr/min	3 x 3.8 ltr/min
Second stage; flow	100-350bar; 1.3 ltr/min	100-350bar; 1.3 ltr/min	3 x 1.1 ltr/min
Nom. pressure	350 Bar	350 Bar	350 bar
Engine	Honda 4-stroke gasoline	B&S 4-stroke gasoline	Honda 4 KW
Power supply	4.0 HP	3.5 HP	5.5 HP
Running time ca.	180 min	180 min	180 min
Rev. per min.	3,250	3,250	3,250
Electric start	no	no	no
Weight	31 kg	31.4 kg	35.5 kg
L x W x H (mm)	450 x 439 x 420	450 x 439 x 420	450 x 439 x 420

Conform prEN 13204	art. nr. 3074.8023
	220V 1.8 kW
Pump	2-stage radial piston
Oil capacity	3,0 l
First stage; flow	0-100bar; 3,4 l/min
Second stage; flow	100-350bar; 1,1 l/min
Nom. pressure	350 Bar
Engine	Electric motor
Power supply	2.5 HP
Rev. per min.	2880
Voltage	1-phase 230V
Full load current	11,0 Amp
Explosion safe	no
Weight	35.5 kg
L x W x H (mm)	450 x 439 x 420



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power units

RESQ Mini/Maxi



art. nr. 3074.8243

The ResQ Mini/Maxi power unit is a lightweight horizontal unit mounted in our New Technology cage. This unit allows you to hook up two tools of your choice and operate both tools simultaneously.



art. nr. 3074.8243

ResQ Mini/Maxi 220V Electric MTO Power Unit with Side Mount Hose Reels

All Power Units are equipped with a dump valve position which allows the operator to change tools without having to touch the engine settings.



art. nr. 3079.5543

ResQ Mini/Maxi Honda MTO Power Unit with Integrated Hose Reels

Rollers for easy sliding of hoses

RESQ Mini/Maxi with Briggs & Stratton motor MTO

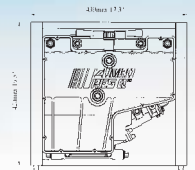
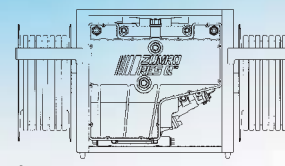
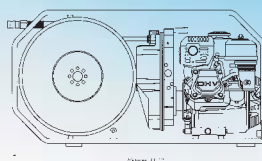
art. nr. 3079.4043

RESQ Mini/Maxi with Honda motor MTO

art. nr. 3079.5043



Open model (2x20m) side hose reel	54 kg
LxWxH (mm)	450 x 800 x 420
Open model (2x25m) side hose reel	61.5 kg
LxWxH (mm)	450 x 800 x 420
Open model (2x30m) side hose reel	66.5 kg
LxWxH (mm)	450 x 800 x 420
Open model (2x20m) integrated hose reel	48 kg
LxWxH (mm)	790 x 440 x 420



Please note that our complete range of Power Units are available with either side- or integrated hose reels, and with either 2 x 20m or 2 x 25m hose reels.

power units

RESQ Mini



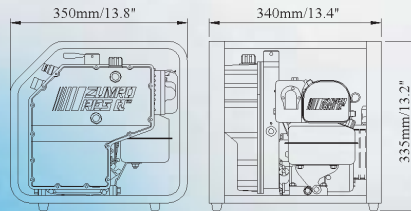
art. nr. 3029.6023

Compact, lightweight and powerful enough to operate any ResQ tool. The Mini Power Unit is easily stored into small compartments and is a lightweight assembly. It combines perfectly with a mini combination tool; an excellent lightweight, quick, forcible entry package.

- compact
- light
- high flow-speed
- maximum useable fluid due to design
- excellent cooling capacity



**ResQ Mini ATO
Enclosed Power Unit**



art. nr. 3029.6523

The closed Mini Power Unit ATO is designed for silent operation.

All types of ResQ Mini Power Units are available as:

- ATO**
Alternative Tool Operation
- STO**
Single Tool Operation



**ResQ Mini STO
Open Power Unit**

art. nr. 3029.6003



**ResQ Mini 220V
Electric STO Open Power Unit**

art. nr. 3024.5003

Mini Power Unit in the electrical open version

Conform prEN 13204	art. nr. 3024.5023	art. nr. 3029.6023
	220V 1,1 kW	Mini Kawasaki
Pump	2-stage radial piston	2-stage radial piston
Oil capacity	2,2 l	2,2 l
First stage; flow	0-100 Bar; 3.2 l/min	0-100 Bar; 3.6 l/min
Second stage; flow	100-350 Bar; 1,1 l/min	100-350 Bar; 1,2 l/min
Nom. pressure	350 Bar	350 Bar
Engine	Electric motor	Kawasaki 4-stroke gasoline
Power supply	1.5 HP	1.75 HP
Running time ca.	N/A	150 min
Rev. per min.	2 880	3 250
Voltage	1-phase, 230V	N/A
Full load current (A)	4,2	N/A
Explosion safe	no	N/A
Weight	25 kg	16.3 kg
L x W x H (mm)	350 x 340 x 335	350 x 340 x 335

n/a not applicable

- open or closed model
- very powerful
- lightweight
- different power supply possible
- small package
- first attack ResQ power unit



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RESQ Hose Reel

NT ResQ Hose Reel for optimum protection and for your convenience.



art. nr. 2075.0000

RESQ Hose Reel

The ResQ Hose Reel is also available in a single hose reel version.

ResQ Single Hose Reel

art. nr. 2075.1000

art. nr. 2075.0000

art. nr. 2075.0500

	2 x 20 m Reel	2 x 30 m Reel
L x W x H (mm)	450 x 439 x 420	450 x 439 x 420
Hose length	2 x 20m	2 x 30m
Weight	26.5 kg	31.5 kg

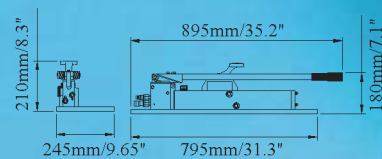
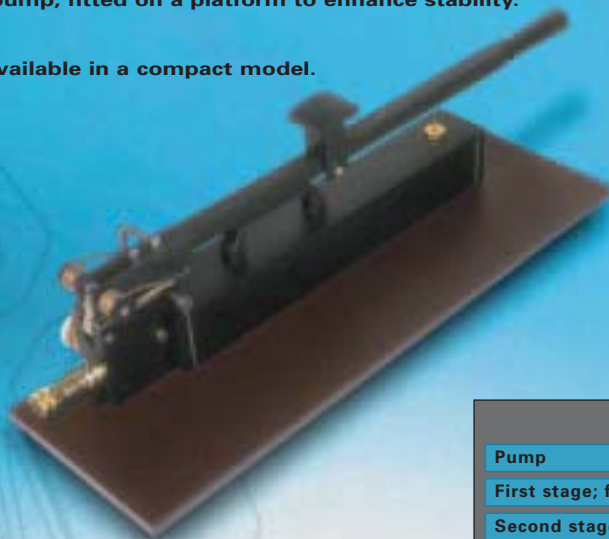
Note: an electric rewind hose reel is available on request

RESQ Handpump

art. nr. 3500.1100

As a back-up to your Power Unit, we offer you a two-stage hand pump, fitted on a platform to enhance stability.

Also available in a compact model.



art. nr. 3500.1200

art. nr. 3500.1100

	Small Pump	Large Pump
Pump	2-stage linear piston pump	2-stage linear piston pump
First stage; flow	0-60 Bar; 0,038 l/stroke	0-60 Bar; 0,038 l/stroke
Second stage; flow	60-350 bar: 0.004 l/stroke	60-350 bar: 0.004 l/stroke
Nom. pressure	350 Bar	350 Bar
Usable oil content	0,7 l	2 l
Weight	6,5 kg	11,3 kg
L x W x H (mm)	700 x 190 x 180	895 x 245 x 230

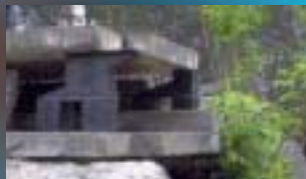
cribbing blocks

RESQ Blocks

Zumro now has Stab (-ilising) Blocks and Cribbing Blocks. We came up with a unique interlocking and stacking option which allows you to reach any desired height. All products are made from 100% recycled polyethylene and can be used for all cribbing purposes during rescue operations.

40

ZUMRO RESQ CRIBBING BLOCKS



These blocks are used by fire brigades and other rescue organisations at road traffic accidents (for stabilising crashed vehicles), as securing blocks during airbag lifting operations or in any other situation where loads need to be secured. The cribbing blocks provide extra safety for the victims as well as the rescuer. Due to the unique interlocking possibility, larger base-surfaces can be created and unlimited cribbing heights can be reached.

High durability
Low weight
Splinter free
Chemical resistant
Harmless to the environment
Durable
Tested load-capacity over 20 tons!
Cost saving with longer life span
High safety factor
Slide-resistant
Non-absorbent material
Low storage consumption
Interlocking
Gradual support Rapid Stair each 10mm
Sideways connectable to widen base
Stackable
100% recycled polyethylene





Saddle Wedge with rope can be pulled to lock each 10 mm of height

42 kg art. nr. 84000705

Set A contains:

- 5x Cribbing Block 40
- 4x Cribbing Block 80
- 4x Wedge
- 2x Saddle wedge with rope
- 5x Connectors
- 2x Rapid Stairs
- 1x Box (610mm x 406mm x 280mm)

All our standard products, like the Wedge, the Crib Block 40 and the Crib Block 80 interlock with the Crib Block 600. The saddle wedge can be pulled to lock each 10mm of height you are lifting.

With the Rapid Stair and Saddle Wedge the lifting can be followed each cm and the load can be secured. Various stacking patterns are possible.

You can also use 4 pieces of Crib Block 600 to create a bigger surface of 600 x 800 mm.

41 kg art. nr. 84000700

Set B contains:

- 5x Cribbing Block 40
- 4x Cribbing Block 80
- 4x Wedge
- 2x Wedge with rope
- 5x Connectors
- 2x Rapid Stairs
- 1x Box (610mm x 406mm x 280mm)

A flat surface can be created if you use it upside down in order to use with lifting bags for example sideways connectable by means of connectors.

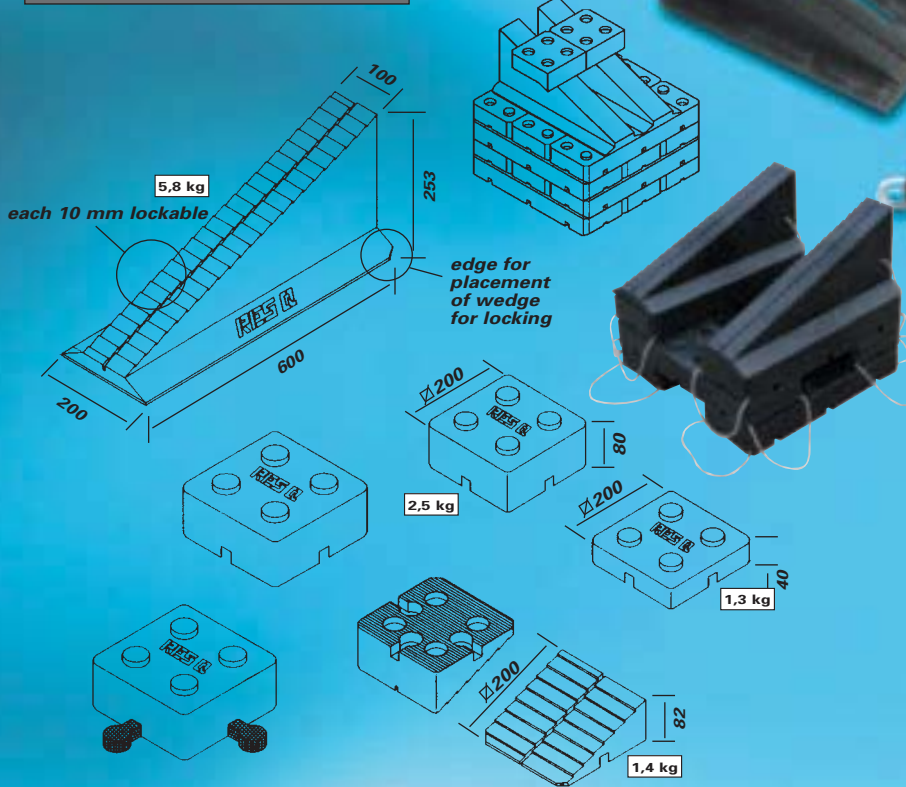
The Crib Block 600 can also be used for underneath the Rapid Stair if higher loads (for instance: trucks) need to be secured.



Crib Blocks can be locked under Rapid Stair for additional height



Box art. nr. 8400.0560



two wedge create a flat working surface and the same height as Crib 80

42 kg art. nr. 84000710

Set C contains:

- 5x Cribbing Block 40
- 5x Cribbing Block 80
- 2x Wedge
- 2x Saddle wedge with rope
- 5x Connectors
- 2x Rapid Stairs
- 1x Box (610mm x 406mm x 280mm)

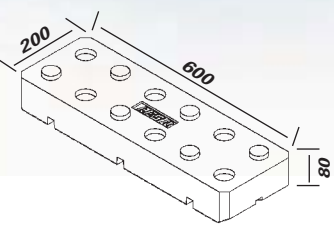
42 kg art. nr. 84000720

Set D contains:

- 4x Stab Block type 1, 2, 3
- 2x Wedge
- 2x Saddle wedge with rope
- 2x Rapid Stair
- 1 x Box (610mm x 406mm x 280mm)

NEW: Crib Block 600 art. nr. 8400.0512

The Crib Block 600 has a load capacity of $50\text{kg/cm}^2 = 0.05 \text{ kN/cm}^2$, that means that 60 ton loads are possible. To create more payload, more blocks next to each other can be fitted. Ideal to make a platform for Railways or trucks. The products are made from 100% recycled polyethylene. Dimensions 600 x 200 x 80 mm.



art. nr. 84000722

Set E consists:

- 6 x Crib Block 600
- 18 x Connector

art. nr. 84000724

Set F consists:

- 8 x Crib Block 600
- 24 x Connector



stabilization system

ResQ Stab Jacks

As every rescuer knows, every lifted load should be cribbed and stabilized. This is a basic safety rule. Not only a lifted load but especially with car accidents the vehicle needs to be stabilized before extrication.

This is for the safety of the victim as well as for the rescuer. As you have seen Zumro also has ResQ Cribbing Blocks for stabilization (see page 38-39).

The ResQ Stab Jack Stabilization System was designed out of recognition of a need for equipment, which is not only user friendly to the rescue team, but equipment that is patient-friendly. This system was developed knowing the simple fact that stabilization does not get the victim out of the wreck. The ResQ Stab Jack design allows the team to spend less effort and time on stabilization and more on patient removal and care.

The extension tubing (jack) is perforated on all four sides with holes. This feature eliminates the search for pinning locations and allows for pinning in any direction. It also saves time by allowing the user placing the pin to get it right the first time without thinking about how the pin is inserted.

The ResQ Stab Jacks are available in two sets:

**Set A Stab Jacks (4-Stand Package) and
Set B Stab Jacks (2-Stand Package)**

Why is the Stab Jack the "right tool for the job"?

VERSATILITY – Our tools are designed with maximum utility in mind. All pieces including bases, ends, and extensions are interchangeable, adjustable, or removable.

PRE-ATTACHED STRAPS – Quick acting cambuckle straps are pre-attached to the bases so they are always there – can't "walk" away. Two straps attached for extra flexibility with the option to attach ratchet straps.

- **ResQ Stab Jacks Set A (4-stand) and Set B (2-stand) can extend from 139 cm up to 221 cm.**
- **Nested Working Load Capacity: 64 kN**
- **Extended Working Load Capacity: 43 kN**
- **Failure Working Load Capacity: 113 kN**



POWERFUL JACK – The jack stands incorporate a powerful smooth acting jack that will accomplish fine-tuning of the stabilization with no jumping! Jack has 12" of travel to overcome problems with soft ground. This jack redefines "lift an inch, crib an inch". You can follow your lift bags all the way! Stab Jack doubles as a telescopic ram and lifting device.



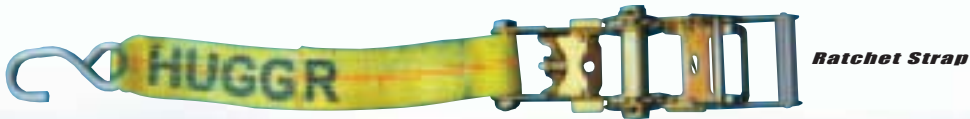
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stabilization system

ResQ Stab Jacks

Cambuckle straps are attached to bolt plates. This allows convenient connection to the base at the pivot bolt.



Ratchet Strap



Round Point

Angle Head

C-Head

Flat point



The **Flat Point End Fitting** is convenient for gaining purchase in narrow pockets where the larger profile end fitting may not be suitable.

The **Angle Head End Fitting** offers a narrow cradle, which will provide a good purchase on the corner of various structural members.

The **C-Head End Fitting** allows one to cradle relatively wide members like an "A" post to assure a positive hold.

The **Round point End Fitting** is convenient where slots or knockouts exist which is typical of a vehicle undercarriage.

art. nr. 8400.3300

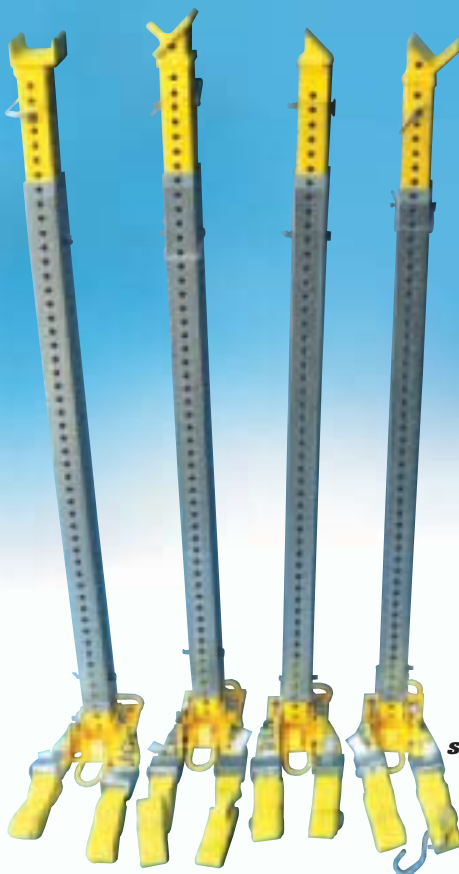
Set A contains:

- 4x Adjustable Stands
- 1x Flat Point End Fitting
- 1x Round Point Fitting
- 1x "C" Head End Fitting
- 1x Angle Head Fitting
- 2x Attached cam buckle straps on each end
- 4x Ratchet strap

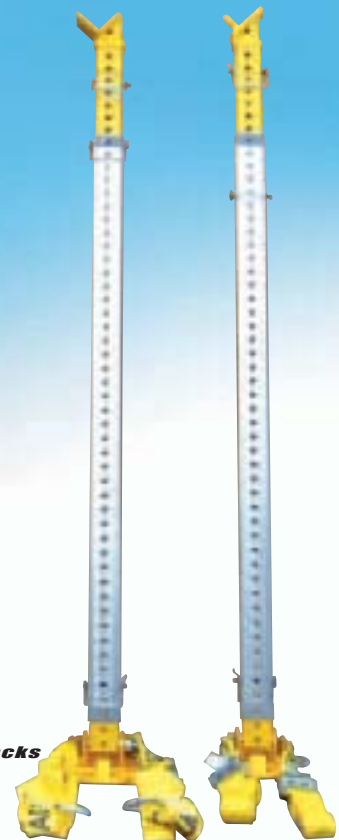
art. nr. 8400.3100

Set B contains:

- 2x Adjustable Stands
- 1x Flat Point End Fitting
- 1x Round Point Fitting
- 2x Attached cam buckle straps on each end
- 2x Ratchet strap



Set A ResQ Stab Jacks



Set B ResQ Stab Jacks

stabilization system

ResQ Stab Jacks

Another unique feature is the side wind jack, which is used to adjust the jack stand. This device is very simple. There are no trip levers, directional levers, air hoses or batteries. Jack adjustment is accomplished by merely winding the crank handle, crank right to tighten/extend, crank left to loosen/retract.

Once desired extension is achieved, stop cranking and let go. The jack will not back drive. The jack is pinned to the base with a clevis pin and self-locking cotter pin.

art. nr. 8400.3200

ResQ Jack Stand Kit:

This ResQ Stepless Jack can extend from 69 up to 231 cm

Standard delivered with Angle Head End Fitting.

Jack Stand can be shortened upto 69cm (excl. head)

When you see the above, it becomes clear that the ideal combination is ResQ Cribbing Blocks or ResQ Stab Jacks with NT ResQ Bags, because they work perfectly together in our effort to make your job (that of the rescuer) easier and faster without jeopardizing safety.

RES Q-LIGHTING



**ZUMRO
RES Q™**
*innovative
for life!*

Lighting

Stem-Lite

art. nr. 5000.1000

Stem Lite is a unique warning and floodlighting system in a very compact housing. Blue warning lights are combined with a flood-light system, giving an advanced warning high above all vehicles. Approaching traffic can be warned at a safe distance which increases safety and better protection for the emergency services and rescuers, at the same time it will give you a big light circumference due to the 2000 Watt bulbs available.

Features

- Fully self-contained light mast
- Fibre glass reinforced base housing
- Stainless steel dual element mast
- Relay operated light switching
- Remote control panel
- Warning buzzer when motor is on
- Indicating lights on control panel
- Complete with all driving panel
- Anodised alu. shroud and top-hat
- Polished chrome plated reflector
- Easy installation
- Special housing on request
- Lamps are automatically switched off if retracted below 1 meter
- Fully weatherproof
- Made in the Netherlands

The compact housing of 43 cm high, contains a rollescopic, stainless steel mast which can be deployed to a maximum height of 2,8 m by means of a small electric motor 12 or 24 VDC. As it is mounted on top of a Fire Truck or any other vehicle which is at least 2 m high, it provides a total height of almost 4,8 m. Without a generator, 4 x 100 Watt bulbs, serving as flood-lights, can be mounted. A dual systems containing 220V and 12/24V bulbs are available on request.

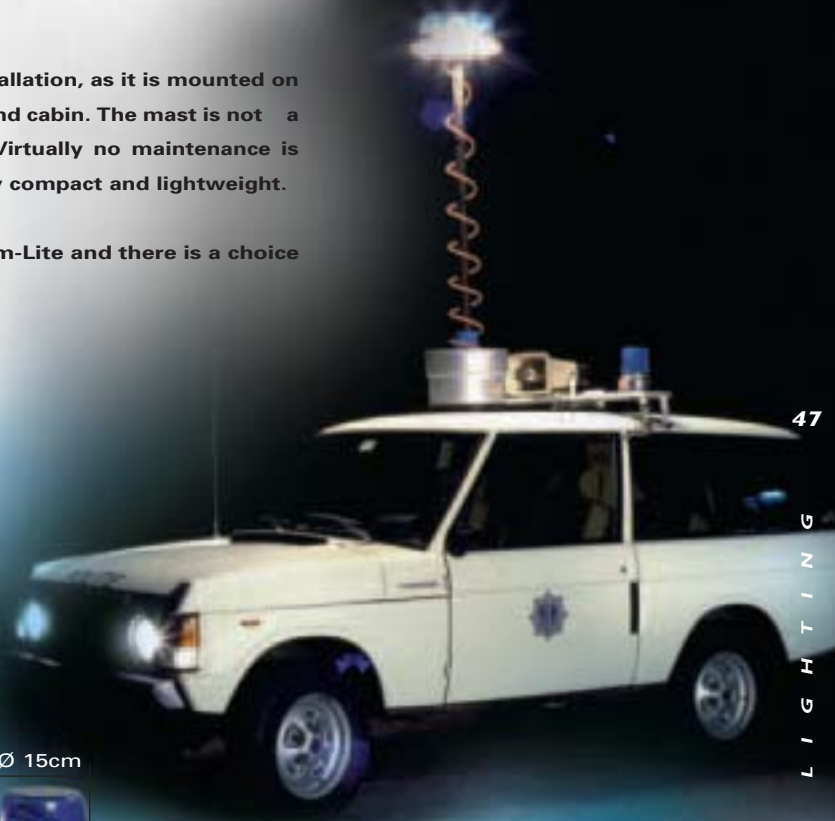


One of the main features of the Stem-Lite is the ease of installation, as it is mounted on top of the vehicles' roof and does not run through the roof and cabin. The mast is not a pneumatic or hydraulic system but electrically operated. Virtually no maintenance is requested and creates a self-contained system which is very compact and lightweight.

The flood-lights are mounted under the top-hat of the Stem-Lite and there is a choice of either the LP and STD model.

The LP model contains three rotating quartz halogen beacons fixed on the top-hat, covered with a amber, blue, green, red or transparent lens. It also includes 4 bulbs for flood-lighting and at any requested configuration up to a maximum of 2000 Watt.

The STD model comes without the lens but includes the top-hat with 4 bulbs functioning as flood-lights to the same specifications as in the LP model. The spectrum of possibilities are quite endless, and systems incorporating cameras, search lights or even single beacons, are to mention a few of these. The reflecting capabilities of the flood-light system, enables a light source with a total circumference of the vehicle.



art. nr. 5020.4000

Stem-Lite STD



art. nr. 5020.1000

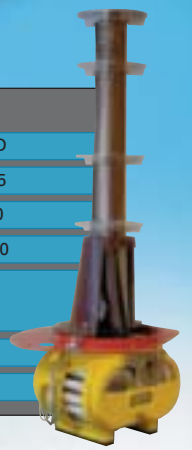
Stem-Lite STD



art. nr. 5100.1000

Stem-Lite LP

	2 0 0 0		1 0 0 0		4 0 0 0	
Model	LP	STD	LP	STD	LP	STD
Weight (kg)	23	21.5	23	21.5	23	21.5
Height retracted (mm)	485	430	485	430	485	430
Height extended (mm)	2650	2650	2650	2650	2650	2650
Power supply drive motor mast and optional beacons	12/24 V/DC		12/24 V/DC		12/24 V/DC	
Work Lights	4 x 500 W		4 x 250 W		4 x 100 W	
Work Lights	110/220 V/DC		110/220 V/DC		12/24 V/DC	



The rollescopic mast system (the heart of the Stem-Lite equipment) was developed for aerospace applications. Applications, where extreme reliability is absolutely essential. Also during the most recent satellite projects, the rollescopic mast has been used as a mechanism to fold-out solar panels, further proof of the great reliability, durability and working safety of this system. It is also very stable: the rollescopic Stem-Lite can easily endure wind forces up to 7.



Stem-Lite is a unique warning system that rises literally head and shoulders above the others. With the advantage of having flood-lighting combined with warning lights, a very compact, dual purpose system, in an ultra light package.

Lighting

Q-lite

The Q-Lite is characterised by its unique ability to tilt, turn and automatic park facilities. The flood lights whilst fully deployed further incorporates a brake system to lock at a specific setting. The reliability and superb quality of the system surpasses any expectations.

Several different variations of the Q-Lite are available, and each model can be ordered with a 5, 7 or 8 m mast. Should the requirements alter from these specifications, individual needs can be tailored on request.

The Q-lite can be tilted and rotated to fit the specific situation. All motors are fitted at the top of the mast.

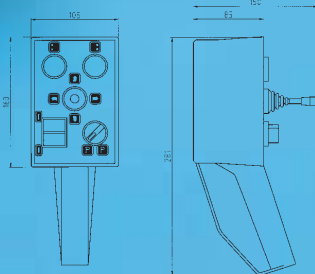
art. nr. 5704.0004

Q-Lite (II) 4x1000W



art. nr. 5901.0375

Remote hand-held controller with joystick operation for turn and tilt unit



- 1 LIGHTS LEFT SIDE ON/OFF
- 2 LIGHTS RIGHT SIDE ON/OFF
- 3 TILT 90° UP
- 4 TURN 175° LEFT
- 5 TURN 175° RIGHT
- 6 TILT 90° DOWN
- 7 MAST UP
- 8 MAST DOWN
- 9 IN OPERATION
- 10 A.T.P. Automatic Transport Positioner
This automatic cycle will turn the lights to their transport position, after which the mast will retract.

art. nr. 9100.0600

Res Q - Mast 8

Nested heights	2310mm
Extended heights	8000mm
Max. operation pressure	1,75 bar
Mast air volume	0,07 m3 at 1,75 bar
Number of mast sections	5
Tube diam. at top	63 mm
Tube diam. at bottom	115 mm
Mast weight	33 kg
Pay load capacity	28 kg
Max. wind speed	115 (km/h)
Inner cables	no

Features

- Fully directional
- Truly remote controlled
- Control functions
- Autom. Transport Positioner (ATP)
- Lightweight
- Excellent light output
- Aluminium housing
- Easy installation
- Low maintenance
- All electrical devices are integrated in top of the mast for easy replacement.
- No accidental breakage of lamps due to ATP

Lighting

Q-lite

The Q-Lite (II) is based on a 24V motor with tilt, turn and automatic park facilities and has 2 x 1000 Watt Halogen bulbs (220V).

The Q-Lite (III) is also a 24V driven version with the possibility to tilt the flood-lighting over 180 degrees and further boasts 2 x 1000 Watt Halogen bulbs (220V) and turning of the mast is done manually.

The Q-Lite (IV) is a simple system utilising 2 x 1000 Watt bulbs, either mounted under or above the crossbar and has a 5m mast with an internal cable. The mast and lighting can only be turned and tilted manually.

The Q-Lite (II) and (III) are remote controlled by means of a joystick for accurate and easy control from a distance.



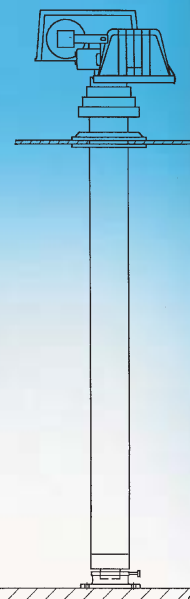
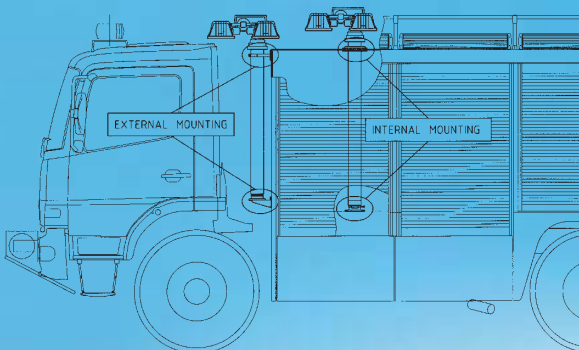
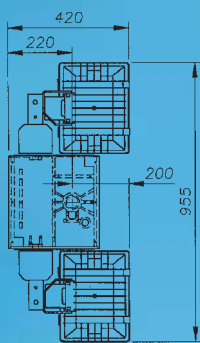
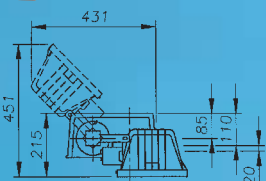
Optional Equipment

Internal or external vehicle mounting kits for airmasts.

Compact, portable, electrically-operated compressors for airmast operation, powered by 12V/DC, 24 V/DC, 110 V/AC or 220 V/AC

art. nr. 5722.0002

Q-Lite (III) 2x1000W



art. nr. 9100.0500

art. nr. 9100.0550

ResQ-Mast 5

ResQ-Mast 7

Nested height	1500 mm	1860 mm
Extended height	5050 mm	7050 mm
Max. Operating pressure	1.75 bar	1.75 bar
Mast air vol. at 1.75 bar	0,04 m3	0,04 m3
Number of mast sections	5	5
Tube diameter of top section	64 mm	64 mm
Tube diameter of bottom section	115 mm	115 mm
Mast weight	32,5 kg	36 kg
Pay load capacity	46 kg	36.5 kg
Maximum wind speed	170 kph	130 kph
Inner cable	no	no

Q-Lite (IV)



accident prevention

Airbag Safety System

art. nr. 9340.0010

including case

The unfolding speed of an airbag is about 400 km/h/250 mph with a maximum axial thrust force of 10 000 N/2,250 lbs.

When in an accident the airbag does not trigger, it becomes a hazard for the rescuers. Accidental airbag release can cause serious injury to both the rescuers and victims. With this fast and easy system there now is a solution for this problem. This system retains the forces and releases them to the side when the airbag is triggered.

With a safety factor of 1,5 you can be sure of a safe working environment.

Available in two models:

Technical Specifications:

Reinforced centre (for protection against airbag cover)

Strap Width : 25 mm

Strap thickness: 1,8 mm

Weight: 0,95 kg

Breaking force: 2,5 kN (per strap)



350 - 390 mm (cars)

400 - 450 mm (trucks and vans)



Airbag Safety System for Passenger

art. nr. 9340.0013

With the introduction of Airbags on the passenger side, it has become quite apparent to also secure and protect the victim and rescuer against an unforeseen deployment of the airbag. Most automobiles have integrated airbags on both sides of the passenger cabin, and during an accident there is a possibility that the airbags are not triggered for some reason. Hence, creating a dangerous situation during rescue operations as these airbags could become unstable and deploy at any moment. It is, therefore, inevitable that safety measures have to be taken to protect everybody involved.

Technical Specifications:

Material: PVC coated 800 x 600 mm. Bondage made out of chemical fibres - reinforced and PU - impregnated

Width: 25 mm

Thickness: 1.8 mm

Color: yellow (RAL 1018)

Breaking force: 2.500 daN

Components to fix: Belt-fastener, D-hook, S-hook, flat K-hook

Packed: Carrying bag

Weight: 3 kg



Protective Cover set consist of 8 pieces

art. nr. 9340.0009



SUPER VAC

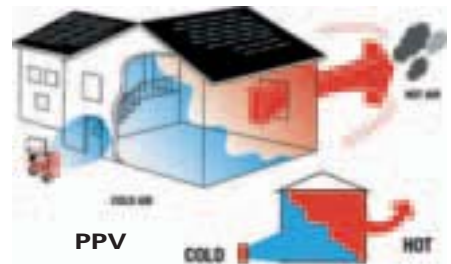


**ZUMRO
RES Q™**
*innovative
for life!*

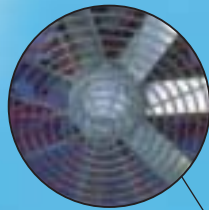
smoke ventilators

Super Vac

Super Vac Mfg. Company Inc. is situated in Colorado, USA and is the worlds' largest emergency ventilation manufacturer. The company was established in the mid 1930's originally known as Super Vacuum Propeller Co.



Through the years they have excelled in several fields, serving Fire Departments and Rescue Services alike. Today both Super Vacuum Mfg. and Zumro B.V. work closely together, sharing the same philosophy. See our mission statement on the first page. There are 2 known systems of ventilation currently used by the Fire Brigades.



7 blades design for improved visibility at the scene.

POSITIVE AND NEGATIVE VENTILATION

NEGATIVE VENTILATION

The original ventilation method that has been used extensively for many years.

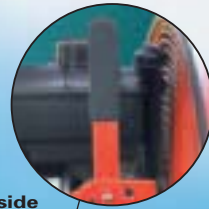
POSITIVE VENTILATION

The latest development in fire attack that has changed the concept of air movement forever. Positive ventilation is now being widely accepted by firefighters as a powerful fire attack tool. This new system offers the following benefits:

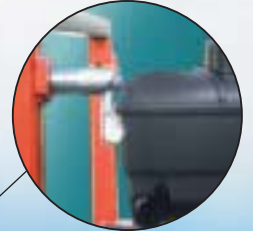
- Lower temperatures for both firefighters and victims.
- Better visibility within the structure for Firefighters.
- Easier identification of the seat of the fire.
- Less water and smoke damage.
- A more professional image for the Fire Brigade by having less property damage.

Properly used, all of the above benefits can be realised through effective use of positive pressure ventilation (PPV).

Only this organisation offers you a selection of different state-of-the-art combustion engines, waterdriven ventilators, battery driven ventilators, electric driven ventilators and available with or without fitted water nozzles.



Tilt handle at the side for safety from 20°, 10°, 0°, -10°



A two hand pull out handle at comfortable height with self locking fasteners allows easy handling (only for 724 and 724W)



Foot brake system on pneumatic tyres



Direct drive so no loss of power by belts



Pneumatic tyres to prevent walking of the fan. Tyres are fitted at the back to allow walking on stairs without damage and absorb the vibration of the fan.



Res Q is a trade mark of ResQ.Tek, Inc. and Zumro B.V., a Dutch corporation with over 30 years of experience in the development, refinement and application of emergency products. All products in the Res Q program, are supplied to you throughout our carefully selected dealer organizations, assuring you of expert service and assistance.



smoke ventilators

AMCA



In 1992, the Air Movement and Control Association International, Inc. (AMCA) set out to develop a single method of test applicable to PPV's for rating. In doing so, the AMCA 240 was devised to set the standard for current and future manufacturers of fans.

In AMCA Standard 240, the test units discharge is directed towards a doorway sized opening in the test chamber. This set up was developed to resemble real fire applications of ppv. It also accounts for entrained air. Only AMCA third party verification gives you honest ratings for ppv fans which test and procedures are performed in accordance the AMCA certified ratings program 240.

All other figures given like non-effective capacity as shown in our catalogue or differently described like additional entrained air by other manufacturers does not say anything about the unit, but the exhaust of the object your are ventilating and therefore should not be considered. **Only look at the facts: AMCA ratings only!!**

Furthermore a Super Vac ppv fan creates a cone of air which virtually make a wall of air that pushes the smoke forward. Other fans with 8 or more blades move less air with increased noises the visibility doesn't improve also due to the turbilation of the smoke and therefore cannot be compared to a real Super Vac ppv fan.



Standard exhaust extension conform DIN moves the CO away from the unit

Third party AMCA 240 tested

- Engine 4 cycle Tecumseh or Honda
- Throttle and stop; engine mounted
- Blade: 7 blade tenzallooy aluminium
- Fan guards: Excede OSHA, LE and UL standards to prevent accidental contact with the blade.
- Fasteners: self locking zinc plated
- Tilt: control lever action 20°, 10°, 0°, -10°
- Frame and housing: pneumatic tires and rubber foot to prevent walking and easy tilt up handles so no twisting of puels by a D-ring handle.
- The frame is constructed of square tubular steel.
- Drive system: direct drive so no loss of power by using belts.
- Tested: all units are tested to AMCA 240 and carry the seal AMCA 240

Tunnel Cyclone Blower



Supervac offers you the complete range of smoke ejectors from the smallest up to the worlds biggest PPV Tunnelblower cyclone.

Supervac offers the solution to use the PPV principle in big volume buildings such as tunnels, subways, airports and shopping malls. Tested capacity in various tunnels up to 1.200.000 m3/hr.

Tunnelblower cyclone	
Motor	8 cylinder petrol driven
HP	350 HP
Fan Diameter	2000 mm
Capacity	340.000 m3/hr
Capacity with entrained air	upto 1.200.000 m3/hr more than 6.4 m/s
Dimensions skid	2030 x 2130 x 2210 mm
Dimensions trailer	5150 x 2300 x 2740 mm
Weight approx	1490 kg

art. nr. 6015.7197 art. nr. 6015.7197H
718 G4 Tecumseh 718 G4 Honda

hp	6.0	6.5
dxwxh (cm)	48 x 56 x 53	48 x 56 x 53
weight (kg)	36	37
speed (rpm)	3,770	3,535
set back (cm)	244	183
angle (°)	18	18
capacity amca 240 m ³ /hr	26,080	26,490
non-eff. capacity m ³ /hr	38,060	38,940

Positive Pressure Ventilators



art. nr. 6020.7206 art. nr. 6020.7206H art. nr. 6020.7200
720 G4 Tecumseh 720 G4 Honda 720E 220

hp	6.0	6.5	1,8 kw (start 45 amp)
dxwxh (cm)	48 x 65 x 65	48 x 65 x 65	48 x 65 x 65
weight (kg)	40	40	40
speed (rpm)	3,385	3,350	2,880
set back (cm)	183	183	183
angle (°)	19	19	19
capacity amca 240 m ³ /hr	30,680	31,570	27,200
non-eff. capacity m ³ /hr	44,100	45,250	36,980



art. nr. 6040.7304H art. nr. 6010.5010
730 G4 Honda GP164S

hp	13	4
dxwxh (cm)	70 x 94 x 99	39 x 48 x 50
weight (kg)	80	25
speed (rpm)	3,510	2,800
set back (cm)	183	183
angle (°)	10	10
capacity amca 240 m ³ /hr	45,600	15,720
non-eff. capacity m ³ /hr	54,200	21,100

art. nr. 6020.7202 art. nr. 6030.7245 art. nr. 6030.7245H
720E 380V EEX 724 G4 Tecumseh 724 G4 Honda

hp	2.2 kW	9	9
dxwxh (cm)	48x63x63	54 x 65 x 74	54 x 65 x 73
weight (kg)	60	54	57
speed (rpm)	2,800	3,245	3,435
set back (cm)	183	183	244
angle (°)	19	18	18
capacity amca 240 m ³ /hr	27,200	36,980	34,370
non-eff. capacity m ³ /hr	36,980	36,980	48,400



art. nr. 6030.3500 art. nr. 6030.4500
Water driven 724W 730W

hp	8.5	13
dxwxh (cm)	54 x 65 x 73	70 x 95 x 101
weight (kg)	34	40
speed (rpm)	2,800	1,800
set back (cm)	240	305
angle (°)	18	18
capacity amca 240 m ³ /hr	30,000	35,850
non-eff. capacity m ³ /hr	45,400	57,600

Advantages of the Ultra Compact Ventilators:

- Economical design
- 4-stroke petrol driven engine
- Seven blade design for improved visibility
- Completely protected frame around shroud
- Rigid rubber feet for stability
- Standard in tilted position for fast and easy operation
- Naturally the tilt option is standard available for precise fan line up
- The smallest and most powerful fans in the industry
- Wheels and handle are optional

ULTRA COMPACT (18")	hp	l x b x h (cm)	weight (kg)	speed (rpm)	set back (cm)	angle (°)	capacity m ³ /hr amca 240	non-eff. capacity
Ultra compact Tecumseh	3,5	43 x 51 x 54	29	3,350	183	18	22,205	33,500
Ultra compact Honda	5	54 x 53 x 54	29	3,480	183	18	22,090	33,208
Ultra compact Tecumseh	6	54 x 53 x 54	31	3,590	183	18	23,780	36,400
Ultra compact Honda	5,5	54 x 53 x 54	32	3,520	183	18	22,930	34,400
Ultra Compact 220V	0.75 kW	54 x 53 x 54	32	2,840	183	18	22,300	34,400
ULTRA COMPACT (20")								
Ultra compact Tecumseh	6	60 x 61 x 63	35	3,510	183	18	25,800	38,500
Ultra compact Honda	5	60 x 61 x 63	35	3,390	183	18	25,200	38,100
ULTRA COMPACT (24")								
Ultra compact Tecumseh	6	61 x 69 x 70	39	3,470	183	18	28,500	61,000
Ultra compact Honda	5	61 x 69 x 70	39	3,340	183	18	28,200	60,000

smoke ventilators

Positive/Negative Ventilators

These 300mm, 400mm, 500mm and 600mm models are the most popular smoke ejectors in the service.

They have all the features that have made Super Vac the most respected name in the business - the square housing design which gives the units added strength and stability; a handle on every corner, which makes them easy to hang on windows, doorways, ladders, or to stack on one another.

And Super Vac's patented propeller, which produces much greater intake of air into the vacuum side, eliminates turbulence at the tips, and the air loss which is common with ordinary fans. The high velocity screw action also sweeps the air back over the motor, so it runs cooler and longer.



DOOR BAR



MOTOR SAFETY SWITCH (EEX) FOR MODEL P164SEZ

FLEXIBLE DUCT AND ADAPTER

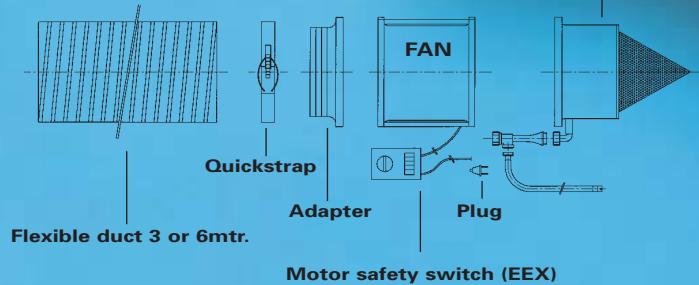
The adapter assembly can be fitted on both sides of the fan.



FOAM GENERATOR FOR P164



Foam generator for 164SE and SEZ which produces 100m³/min. ultra high expansion foam preset at 2%



Model	Motor	Expl.	Amp	Housing	DxWxH(mm)	Weight	RPM	AMCA (m3/hour)	non effective capacity x1000
								210 240	
P 124S	115V - 1 phase - 0.25 kW/0.33 hp		8	steel	315 x 380 x 390	18 kg	2800	4500 6280	20
P 124SEZ-1	220V - 1 phase - 0,37 kW/0.5 hp	*	10	steel	315 x 380 x 390	29 kg	2820	4200 6000	21
P 124SEZ	380V - 3 phase - 0,37 kW/0.5 hp	*	4,7	steel	315 x 380 x 390	29 kg	2820	4200 6000	21
P 164S	110/220V - 1 phase - 0,25 kW/0.33 hp		5,8	steel	330 x 480 x 490	20 kg	1425	6000 8800	27
P 164SE	110/220V - 1 phase - 0,25 kW/0.33 hp	^	6,6 (17,5)	steel	330 x 480 x 490	23 kg	1425	6000 8800	27
P 164SEZ-1	220V - 1 phase - 2,2 kW/2.95 hp	*	10,5	steel	440 x 480 x 490	50 kg	2780	11000 13000	32
P 164SEZ	380V - 3fase - 2,2 kW/2.95 hp	*	4,7	steel	440 x 480 x 490	50 kg	2780	11000 13000	32
GP 164S	4-stroke petrol driven 4 hp	-		steel	390 x 480 x 500	25 kg	2500	9000 15720	21
P 200S	110/220V - 1 phase - 0,75 kW/1 hp		15,4 / 7,7	steel	355 x 730 x 640	33 kg	1425	9200 16100	35
P 200SE	110/220V - 1 phase - 0,75 kW/1 hp	^	13,2 / 7,7	steel	405 x 630 x 640	35 kg	1425	9200 16100	35
P 200SEZ-1	220V - 1 phase - 0,75 kW/1 hp		10	steel	420 x 630 x 640	38 kg	1385	10000 17000	37
P 200SEZ	380V - 3 phase - 0,75 kW/1 hp		2,8	steel	420 x 630 x 640	37 kg	1385	10000 17000	37
P 200SW	Water motor - 2,5 bar/36.3 PSI								
	340-940 l/min. / 90-250 g/min		-	steel	420 x 630 x 640	35 kg	5000	>6700/11700 <23000 40250	59
P 244SE	110/220V - 1 phase - 1,1 kW/1.5 hp	^	19,8 / 9,9	steel	475 x 710 x 720	57 kg	1425	14000 18300	39
P244SEZ-1	220V - 1 phase - 0,75 kW/1 hp		5,6	steel	475 x 710 x 720	58 kg	1385	14000 18300	39
P 244SEZ	380V - 3 phase - 0,75 kW/1 hp		3,1	steel	475 x 710 x 720	67 kg	1385	14000 18300	39

* = EEX-D IIB IP 55 T5 F(e)G3, motor conform ATEX ^ = Explosion proof conform USA standard

Established in 1971, Zumro was the first European supplier of hydraulic rescue equipment.

Our company history is a continuous path of product innovation aimed solely at the Fire and Rescue Service - a market that we service exclusively worldwide.

Zumro has never been tempted to enter the world of high pressure industrial hydraulics, preferring to concentrate and specialise our activities in producing the finest hydraulic and pneumatic rescue equipment available today. This focused company mentality has seen us manufacture all our hydraulic equipment to an operating pressure of 350 bar - the optimum pressure for Fire Service life. Our pioneering attitude has also led to a large number of world first's, some of which include:

1972 Zumro introduces the concept of hydraulic rescue equipment to the world market

1974 The introduction of Supervac smoke ventilators to the European market

1975 The successful debut of the Stem-Lite mast - a rollescopic mast originally designed for NASA

1978 Zumro launches the world's first hydraulic ram dedicated for Fire Service use

1986 The European introduction of positive pressure ventilation (PPV) with Supervac PPV fans

1990 The successful launch of Q-Lite - the first truly remote controlled directional lighting system

1991 Zumro develops the ResQ Q-Cutter, unique in its ability for the cutting head to rotate into areas where access is difficult. A product seen to be so ahead of its time that it received the Innovation Award from The Innovation Centre. The first to introduce CONFLUX blades for impact-free cutting

1992 The introduction of the Frontliner combination tool with its unique cutting blade design and removable jaws

1992 Zumro receives the ION award for ergonomic design excellence in recognition of the design of the newly launched ResQ 40 spreader

More awards - this time the German I.F.N. design award for the ResQ Q-Cutter

1993 Zumro introduces their unique flat-face, non-drip hydraulic couplings

1995 The successful launch of Zumro's pioneering NT Power Units

1996 Zumro revolutionise the rescue industry yet again with the launch of NT ResQ Bags - another world first that renders the traditional combination of low and high pressure lifting bags redundant in one stroke

1996 Zumro introduces MPS (Multiple Pressure System) enabling connection to any existing hydraulic system

1997 The market launch of Zumro's simple and innovative stabilisation block and step system

1998 First again - Zumro's extendible telescopic ram hits the market. Reacting quickly to several major tunnel fires, Zumro introduces "Cyclone" - the world's largest and most powerful PPV fan dedicated for tunnel ventilation

1999 27 years on and still leading the way - Zumro introduces the first modular airplane recovery system utilising our unique NT-ResQ bags

As we move into the next century **2000** will continue to harness rapid advances in technology, building on our proud history of product innovation and quality

2001 Zumro introduces the Integrated Handpump, the Great White and the 410 Frontliner

2002 Introduction of a simple stabilization system: the ResQ Stab Jacks

Zumro - quite simply the finest rescue equipment available today

2004 Zumro introduces the ResQ 210 Cutter and ResQ 370 Frontliner

Your dealer:



Zumro ResQ BV

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RWTUV

Res Q is a trade mark of ResQ Tek, Inc. and Zumro B.V., a Dutch corporation with over 30 years of experience in the development, refinement and application of emergency products. All products in the Res Q program, are supplied to you throughout our carefully selected dealer organizations, assuring you of expert service and assistance.