



# Rescue Tools

the power of innovation

## New Car Technology (NCT™) versus General Purpose



### General Purpose cutters according to EN 13204

Since end 2004 the European standard EN 13204 for hydraulic rescue tools is replacing all existing national norms. This EN-norm is a **General Purpose** norm that has to take into account not only road traffic accidents, but also applications like industrial accidents, accidents in an urban environment, train accidents etc. To allow users to compare the performance of cutters a table with cutting requirements was included in the norm. Depending on its performance, a cutter can be categorised A-H (see table below). In order to be classified in a cutting category successfully a cutter must be able to cut each of 5 profiles 12 times, 60 cuts in total, with one set of blades. A cutter is classified in the category of the smallest profile it can cut successfully.

| CUTTING CATEGORIES EN 13204 |    |          |            |        |               |
|-----------------------------|----|----------|------------|--------|---------------|
| category                    | ●  | ■        | ○          | □      | ▬             |
|                             | mm | mm       | mm         | mm     | mm            |
| A                           | 14 | 30 x 5   | 21.3 x 2.3 |        |               |
| B                           | 16 | 40 x 5   | 26.4 x 2.3 |        |               |
| C                           | 18 | 50 x 5   | 33.7 x 2.6 | 35 x 4 |               |
| D                           | 20 | 60 x 5   | 42.6 x 2.6 | 40 x 4 | 50 x 25 x 2.5 |
| E                           | 22 | 80 x 8   | 48.3 x 2.9 | 45 x 4 | 50 x 30 x 3.0 |
| F                           | 24 | 80 x 10  | 60.3 x 2.9 | 50 x 4 | 60 x 40 x 3.0 |
| G                           | 26 | 100 x 10 | 76.1 x 3.2 | 55 x 4 | 80 x 40 x 3.0 |
| H                           | 28 | 110 x 10 | 76.1 x 4.0 | 60 x 4 | 80 x 40 x 4.0 |

Example: a cutter with this cutting performance will be classified as "E"

The basis for the development of the EN-norm was the fact that the extrication of victims from a vehicle is one of the many applications where hydraulic rescue equipment is used. That is why we speak of General Purpose equipment. The EN-norm and in fact any norm, is by nature static. In other words: the specifications of the EN-norm are set and will not change for the coming years.

## Holmatro®'s answer to new developments in car industry: NCT™ (New Car Technology)

The majority of the use of hydraulic rescue cutters will be in car accidents. It is precisely the car industry that is continuously developing and therefore constantly asking for improved cutters. On the basis of continuous tests in our laboratory in which hardness, toughness and construction (method of several layers) are analysed, Holmatro is at an early stage in a position to adapt the rescue equipment to the new situation.



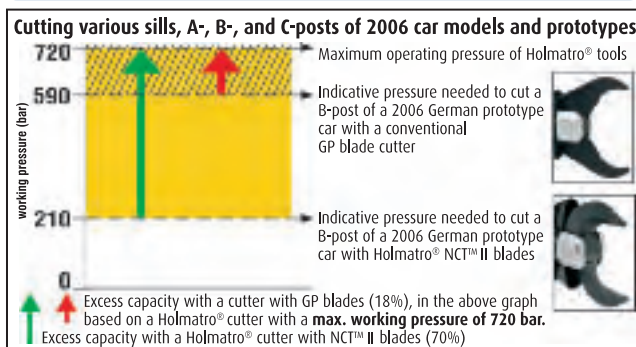
These tests clearly show that the performance of a cutter depends on many aspects. The blade design is one of the major aspects and has two important parameters, namely the blade material and the blade shape. From extensive tests and research it has also appeared that the blade shape that is best able to cut the official EN general-purpose materials, differs greatly from that of a shape more suitable for the latest vehicle constructions. In order to remain ahead of the developments in the car industry, Holmatro has therefore developed a new series of blades: the NCT™ II (New Car Technology) blades.

The starting point for determining the best shape and blade opening of the NCT™ II blades was the increasing diameter and the design of the sills and A-, B- and C-posts. Extensive tests on existing vehicles, but especially on vehicle prototypes still to be introduced, have indicated that in almost all situations, with one cutting movement, the section selected can be cut with a NCT™ II cutter.



## New Car Technology – NCT™

### Reserve for the future

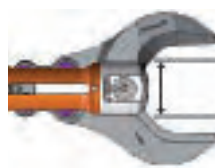


### The choice is yours:

- A Holmatro® NCT™ II cutter if your main application is road traffic accidents
- A Holmatro® GP cutter if your application can be anything and varies from road traffic accidents to urban search and rescue, industrial accidents, train accidents etc.

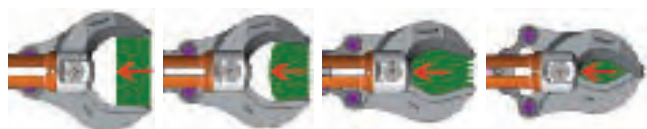


### Improved blade design – NCT™ II



- U-shaped blades based on latest models B-pillars
- allows wide material to be cut at the strongest point of the cutter

### Improved blade design – NCT™ II



- pulls material towards the strongest point of the cutter
- superior cutting performances tested on the latest car models
- up to 95 ton cutting capacity

**NCT™ II also cuts according to the highest EN 13204 class H and even higher (CU 4050 C NCT™ II)**

**Contact your local dealer for NCT™-presentation/demonstration. For contact details see [www.holmatro.com](http://www.holmatro.com)**

## CORE™ Technology – a major step forward in the field of extrication



- **QUICK**
- **EASY**
- **SAFE**

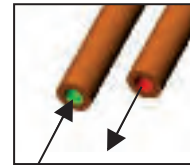
### What is CORE™ Technology?

CORE™ Technology refers to the hoses, couplers and valves of a rescue system. In other words: the way hydraulic oil is directed from pump to tool and vice versa. A traditional dual hose system consists of a separate pressure and return hose connecting pump and rescue tool. A CORE™ system consists of a high-pressure inner hose inside a low-pressure outer hose. The hydraulic principle and tool performance of CORE™ Technology and traditional technology are of course identical.



### Why CORE™ Technology?

CORE™ Technology is a revolutionary turning point in rescue tool technology. CORE™ allows you, as a rescuer to re-think and simplify your extrication techniques and your standard operating procedures, as well as the very underlying concepts these techniques and procedures are based on. Once working with CORE™, you will discover the unprecedented benefits CORE™ offers. Compared to working with a traditional system, **working with CORE™ saves time, is more user-friendly, makes a more efficient use of manpower and is safer.**



## How the rescuer will benefit from the many new features CORE™ Technology offers:

### Rolling and unrolling of a CORE™ hose

- a CORE™ hose can rotate freely on both ends (360°)
- impossible to get twisted

**360°**



- reinforced with state-of-the-art multilayered para-aramid yarn
- greater degree of hose flexibility



- a CORE™ hose is one single hose
- much easier to handle than a traditional dual hose
- user-friendly
- hose unrolls itself without kinking



### Coupling and uncoupling

- time-saving
- only half the number of couplers (and dust caps) compared to a traditional dual hose system
- no pigtail hoses
- coupling direct on the tool



- Bend restrictors at either end of the hose and hose binder
- maximum grip during coupling and uncoupling and easy to store



- clear indications printed on hose
- one single glance to see which side of the hose should be connected to the tool



### Changing under flow

- no longer necessary to change over at the pump
- rescue team members can be deployed more efficiently
- less hose handling
- one hose less at the extrication scene
- rescuer can change his tool any time
- connect a tool any time without changing over at the pump
- sequence of getting started and packing up is much more flexible
- pump can be started and be under flow before connecting the hose to the pump and to the tool



### Number of hoses in action circle

- fewer hoses on the extrication scene
- more organised and “clean” working area and reduced risk of tripping over hoses

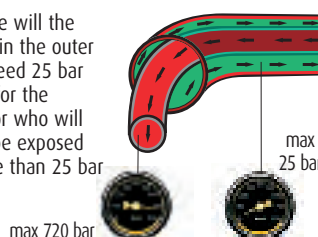
### Hose colour

- with CORE™ it is no longer relevant to be working with different hose colours for different tools
- one colour so more flexibility as hoses are 100% interchangeable
- 4 colours available



### Protected power

- in no case will the pressure in the outer hose exceed 25 bar
- safety for the operator who will never be exposed to more than 25 bar



### Hose kinking

- CORE™ hoses are reinforced with para-aramid yarn
- no kinking (and possible damage resulting from it)

### Weight

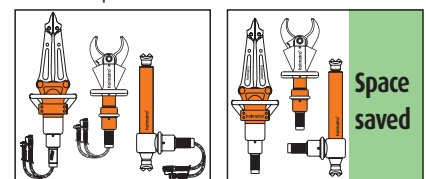
- CORE™ Technology reduces hydraulic hose weight around 40%
- easier handling



left = CORE™ right = Traditional dual system

### Dimensions

- CORE™ Technology tools have no pigtail hoses
- saves space



### Converting a traditional dual hose system to a CORE™ system only takes a couple of minutes





## NCT™ II CUTTERS - New Car Technology



| SPECIFICATIONS                          | CU 4035 C NCT™ II | CU 4050 C NCT™ II |
|-----------------------------------------|-------------------|-------------------|
| article number                          | 150.012.095       | 150.012.094       |
| max. working pressure bar/Mpa           | 720 / 72          | 720 / 72          |
| blade opening mm                        | 159               | 181               |
| cutting force kN / t                    | 355 / 36.2        | 927 / 95          |
| round bar (acc. to EN 13204) mm         | 32                | 41                |
| integrated lighting / i-Bolt            | ✓ / ✓             | ✓ / ✓             |
| weight ready for use CORE™/dual hose kg | 13.5 / 14.6       | 18.1 / 19.2       |
| dimensions (L x W x H) CORE™ mm         | 714 x 270 x 202   | 775 x 270 x 218   |
| dimensions (L x W x H) dual hose mm     | 749 x 270 x 202   | 810 x 270 x 218   |
| EN 13204 CORE™                          | AC145E-13.5       | BC165H-18.1       |
| EN 13204 dual hose                      | AC145E-14.6       | BC165H-19.2       |



CU 4035 C NCT™ II



CU 4050 C NCT™ II



## Features / Benefits

### All models also available in dual hose version



| model           | art.nr.     |
|-----------------|-------------|
| CU 4035 NCT™ II | 150.012.088 |
| CU 4050 NCT™ II | 150.012.093 |

technical details same as CORE™ version, except weight

### Integrated lighting in handle



- clear view under all circumstances



### Unmatched New Car Technology - NCT™



- cuts all modern, strong and complex posts

### All Holmatro® cutters:

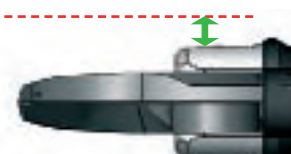
- temperature reach -20°C - +80°C
- hydraulic safety factor 2:1 (1440 bar)
- endurance test cutter of 1000 cycles of biting in a bar that can't be cut at 720 bar
- endurance test dead man's handle of 6000 cycles

### New i-Bolt technology

Traditional bolt construction



New i-Bolt construction



- flatter design for better access in tight places

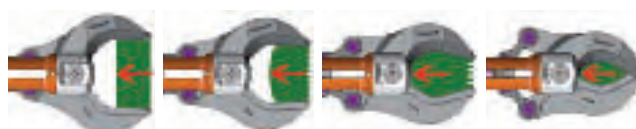


Squeezes ("softer" aluminium) blade holder. Blades are squeezed indirectly only.



Squeezes blades directly for a superior cutting performance.

### Improved blade design - NCT II



- pulls material towards the strongest point of the cutter
- superior cutting performances tested on the latest car models
- 41 mm round bar (CU 4050 C NCT™ II)

• QUICK • EASY • SAFE



For detailed information see page 3

## GP CUTTERS - General Purpose



| SPECIFICATIONS                          | CU 4005 C      | CU 4010 C GP    | CU 4020 C GP    | CU 4030 C GP    | CU 4031 C GP    | CU 4035 C GP    | CU 4040 C GP    |
|-----------------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| article number                          | 150.012.128    | 150.012.139     | 150.012.164     | 150.012.162     | 150.012.125     | 150.012.123     | 150.012.183     |
| max. working pressure bar/Mpa           | 720 / 72       | 720 / 72        | 720 / 72        | 720 / 72        | 720 / 72        | 720 / 72        | 720 / 72        |
| blade opening mm                        | 40             | 142             | 152             | 182             | 300             | 237             | 282             |
| cutting force kN / t                    | 130 / 13.3     | 254 / 25.9      | 394 / 40.2      | 394 / 40.2      | 380 / 38.8      | 380 / 38.8      | 470 / 47.9      |
| round bar (acc. to EN 13204) mm         | 16             | 24              | 26              | 26              | 32              | 32              | 35              |
| integrated lighting / i-Bolt            | - / -          | - / -           | - / √           | - / √           | √ / √           | √ / √           | √ / -           |
| weight ready for use CORE™/dual hose kg | 3.2 / 3.9      | 7.8 / 8.9       | 10.7 / 11.8     | 10.9 / 12.0     | 13.8 / 14.9     | 14.2 / 15.3     | 17.6 / 18.7     |
| dimensions (L x W x H) CORE™ mm         | 355 x 125 x 69 | 622 x 210 x 170 | 690 x 230 x 187 | 711 x 230 x 187 | 759 x 270 x 202 | 771 x 270 x 202 | 804 x 270 x 218 |
| dimensions (L x W x H) dual hose mm     | 382 x 125 x 69 | 657 x 210 x 170 | 725 x 230 x 187 | 746 x 230 x 187 | 794 x 270 x 202 | 806 x 270 x 202 | 839 x 270 x 218 |
| EN 13204 CORE™                          | AC40B-3.2      | AC116D-7.8      | AC133E-10.7     | BC160F-10.9     | BC190H-13.8     | CC205H-14.2     | CC220H-17.6     |
| EN 13204 dual hose                      | AC40B-3.9      | AC116D-8.9      | AC133E-11.8     | BC160F-12.0     | BC190H-14.9     | CC205H-15.3     | CC220H-18.7     |



CU 4010 C GP



CU 4020 C GP



CU 4031 C GP



CU 4035 C GP

## Features / Benefits

### All models also available in dual hose version



| model      | art.nr.     |
|------------|-------------|
| CU 4005    | 150.012.148 |
| CU 4010 GP | 150.012.138 |
| CU 4020 GP | 150.012.133 |
| CU 4030 GP | 150.012.163 |
| CU 4031 GP | 150.012.124 |
| CU 4035 GP | 150.012.120 |
| CU 4040 GP | 150.012.184 |

technical details same as CORE™ version, except weight

### Various extra hardened and regrindable shapes of blades

- full choice



CU 4020 C GP



CU 4031 C GP



CU 4010 C GP  
CU 4030 C GP  
CU 4035 C GP  
CU 4040 C GP

### Moving parts covered



- safe for the operator



### New i-Bolt technology

Traditional bolt construction



New i-Bolt construction



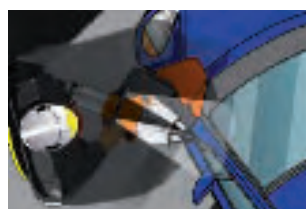
- flatter design for better access in tight places



Squeezes ("softer" aluminium) blade holder. Blades are squeezed indirectly only.

Squeezes blades directly for a superior cutting performance.

### Integrated lighting in handle



- clear view under all circumstances



### Lightest mini cutter in its class (CU 4005 C)



CU 4005 C

- weight ready for use only 3.2 kg
- can be carried and operated with one hand (push button)

• QUICK • EASY • SAFE



For detailed information see page 3

## SPREADERS



| SPECIFICATIONS                         |           | SP 4230 C       | SP 4240 C       | SP 4260 C       | SP 4280 C       |
|----------------------------------------|-----------|-----------------|-----------------|-----------------|-----------------|
| article number*                        |           | 150.012.113     | 150.012.105     | 150.012.110     | 150.012.116     |
| max. working pressure                  | bar / Mpa | 720 / 72        | 720 / 72        | 720 / 72        | 720 / 72        |
| spreading                              | mm        | 835             | 686             | 833             | 677             |
| max. spreading force up to             | kN / t    | 86 / 8.8        | 206 / 21.0      | 269 / 27.4      | 397 / 40.5      |
| min. spreading force**                 | kN / t    | 33 / 3.4        | 43 / 4.4        | 60 / 6.1        | 85 / 8.7        |
| squeezing force                        | kN / t    | 47 / 4.8        | 65 / 6.6        | 83 / 8.5        | 177 / 18.1      |
| pulling force                          | kN / t    | 53 / 5.4        | 90 / 9.2        | 104 / 10.6      | 143 / 14.5      |
| weight ready for use CORE™ / dual hose | kg        | 17.2 / 18.3     | 18.1 / 19.2     | 23.9 / 25.0     | 26.9 / 28.0     |
| dimensions (L x W x H) CORE™           | mm        | 855 x 316 x 206 | 771 x 316 x 206 | 883 x 316 x 224 | 803 x 316 x 224 |
| dimensions (L x W x H) dual hose       | mm        | 890 x 316 x 206 | 806 x 316 x 206 | 918 x 316 x 224 | 838 x 316 x 224 |
| EN 13204 CORE™                         |           | AS33/835-17.2   | AS43/686-18.1   | BS60/833-23.9   | CS85/677-26.9   |
| EN 13204 dual hose                     |           | AS33/835-18.3   | AS43/686-19.2   | BS60/833-25.0   | CS85/677-28.0   |

\* all spreaders with integrated lighting in carrying handle

\*\* according to EN 13204: 25 mm from the tips over full spreading range



## SPREADERS - ACCESSORIES

| for model                                               | SP 4230 C   | SP 4240 C   | SP 4260 C   | SP 4280 C   |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|
| 1 1 x spare tip                                         | 150.013.602 | 150.013.702 | 150.183.188 | 150.183.187 |
| 2 1 x cutting tip                                       | 150.013.616 | 150.013.703 | 150.013.166 |             |
| 3 set pulling attachments                               | 150.582.155 | 150.582.006 | 150.182.021 | 150.182.022 |
| 4 set pulling chains 3 m + 1.5 m                        | 150.582.152 | 150.582.152 | 150.582.261 | 150.182.019 |
| 5 1 x tip with extra long tooth*                        |             | 150.183.189 |             |             |
| case with all tips (2 each) and set pulling attachments | 150.582.017 | 150.582.014 | 150.582.013 |             |
| case with set pulling chains                            | 150.582.021 | 150.582.021 | 150.582.020 |             |

\* not in case 150.582.014



## Features / Benefits

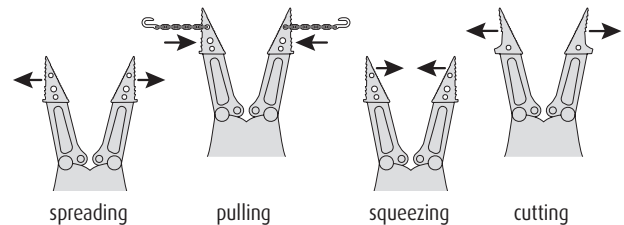
### All models also available in dual hose version



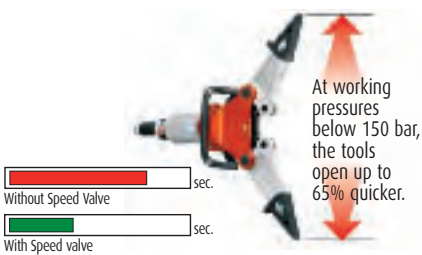
| model   | art. nr.    |
|---------|-------------|
| SP 4230 | 150.012.112 |
| SP 4240 | 150.012.114 |
| SP 4260 | 150.012.115 |
| SP 4280 | 150.012.117 |

technical details same as CORE™ version, except weight

### Versatile



### Unique Speed Valve in all spreaders



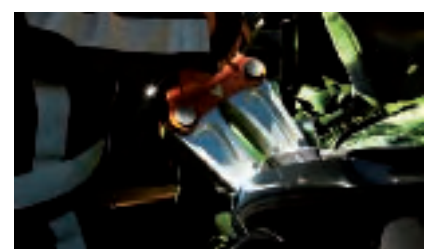
- up to 65% faster tool opening for quicker reactions

### Optimal balance between opening force and spreading width



- power available where you need it: with the arms closed (EN 13204)

### Integrated lighting in handle



- clear view under all circumstances



## COMBI TOOLS



| SPECIFICATIONS                            |           | CT 4120 C       | CT 4150 C       |
|-------------------------------------------|-----------|-----------------|-----------------|
| article number                            |           | 150.012.141     | 150.012.099     |
| max. working pressure                     | bar / Mpa | 720 / 72        | 720 / 72        |
| spreading                                 | mm        | 268             | 360             |
| max. spreading force up to                | kN / t    | 200 / 20.4      | 211 / 21.5      |
| min. spreading force*                     | kN / t    | 26 / 2.7        | 35 / 3.6        |
| cutting opening                           | mm        | 191             | 229             |
| cutting force                             | kN / t    | 247 / 25.2      | 380 / 38.8      |
| squeezing force                           | kN / t    | 46 / 4.7        | 76 / 7.8        |
| pulling distance                          | mm        | 181             | 416             |
| pulling force                             | kN / t    | 61 / 6.2        | 51 / 5.2        |
| integrated lighting / i-Bolt              |           | - / -           | ✓ / ✓           |
| weight ready for use CORE™ / dual hose kg |           | 8.2 / 9.3       | 14.2 / 15.3     |
| dimensions (L x W x H) CORE™              | mm        | 675 x 210 x 170 | 787 x 270 x 202 |
| dimensions (L x W x H) dual hose          | mm        | 710 x 210 x 170 | 822 x 270 x 202 |
| EN 13204 CORE™                            |           | BK26/268-E-8.2  | CK35/360-H-14.2 |
| EN 13204 dual hose                        |           | BK26/268-E-9.3  | CK35/360-H-15.3 |

\* according to EN 13204: 25 mm from the tips over full spreading range



CT 4150 C  
Round bar  
(acc. EN 13204)  
Ø 32 mm



CT 4120 C  
Round bar  
(acc. EN 13204)  
Ø 24 mm



## COMBI TOOLS - ACCESSORIES

| for model                                            | CT 4120 C   | CT 4150 C   |
|------------------------------------------------------|-------------|-------------|
| 1 set pulling attachments                            | 150.582.551 | 150.582.026 |
| 2 set pulling chains 3 m + 1.5 m                     | 150.582.152 | 150.582.152 |
| case with set pulling attachments and pulling chains | 150.582.028 | 150.582.018 |



1

2

## Features / Benefits

### All models also available in dual hose version



| model   | art. nr.    |
|---------|-------------|
| CT 4120 | 150.012.140 |
| CT 4150 | 150.012.092 |

technical details same as CORE™ version, except weight

### Non-slip carrying handle and perfect balance



- always a perfect grip - easy to pick up and carry without the tool toppling against your leg

### Integrated lighting in handle



- clear view under all circumstances

### Well serrated spreading/squeezing tips



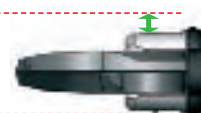
- perfect grip and no changing of tips necessary

### New i-Bolt technology

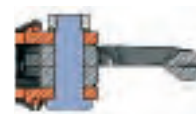
Traditional bolt construction



New i-Bolt construction



- flatter design for better access in tight places



Squeezes ("softer" aluminium) blade holder. Blades are squeezed indirectly only.

Squeezes blades directly for a superior cutting performance.



## COMBISETS



| SPECIFICATIONS | CT 4123 C                                                              | CT 4123                                                                                  |
|----------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| article number | 150.012.159                                                            | 150.012.156                                                                              |
| consisting of: | 3-stage hand pump HTT 1800 UC *                                        | 3-stage hand pump HTT 1800 U *                                                           |
|                | mounted on stainless steel bottom plate with non-slip carrying handles |                                                                                          |
|                | 5 m. CORE™ hose, orange with CORE™ coupler on both ends                | 3.6 m. dual hose, orange. On one side fixed to the pump, on the other side with coupler. |
|                | Combi tool CT 4120 C **                                                | Combi tool CT 4120 **                                                                    |

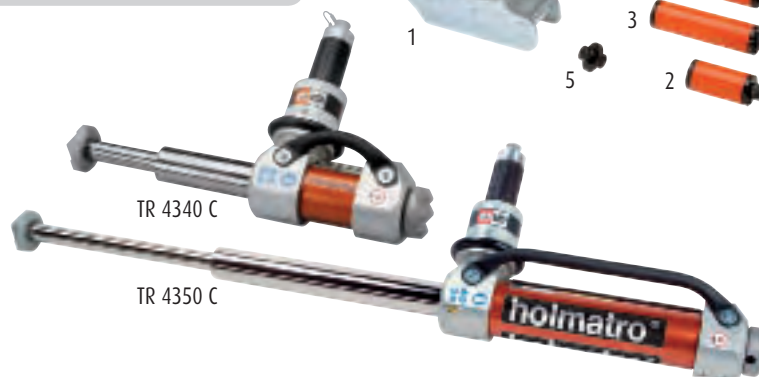
\* see page 13 for technical details

\*\* see above for technical details

## RAM JACKS - SINGLE PLUNGER



| SPECIFICATIONS                          | RA 4311 C       | RA 4313 C       | RA 4315 C       |
|-----------------------------------------|-----------------|-----------------|-----------------|
| article number                          | 150.032.042     | 150.032.043     | 150.032.044     |
| max. working pressure bar / Mpa         | 720 / 72        | 720 / 72        | 720 / 72        |
| spreading force over full stroke kN / t | 100 / 10.2      | 100 / 10.2      | 100 / 10.2      |
| retracted / extended length mm          | 315 / 465       | 415 / 665       | 565 / 965       |
| spreading stroke mm                     | 150             | 250             | 400             |
| weight ready for use CORE™/dual hose kg | 7.9 / 9.0       | 9.0 / 10.1      | 10.9 / 12.0     |
| dimensions (L x W x H) CORE™ mm         | 315 x 122 x 325 | 415 x 122 x 325 | 565 x 122 x 325 |
| dimensions (L x W x H) dual hose mm     | 315 x 122 x 360 | 415 x 122 x 360 | 565 x 122 x 360 |
| EN 13204 CORE™                          | R100/150-7.9    | R100/250-9.0    | R100/400-10.9   |
| EN 13204 dual hose                      | R100/150- 9.0   | R100/250-10.1   | R100/400-12.0   |



## RAM JACKS - SINGLE PLUNGER - ACCESSORIES

| item | description            | art. nr.    |
|------|------------------------|-------------|
| 1    | RAM support HRS 22     | 150.181.011 |
| 2    | extension pipe 125 mm* | 150.181.570 |
| 3    | extension pipe 225 mm* | 150.181.571 |
| 4    | extension pipe 500 mm* | 150.181.572 |
| 5    | connection piece       | 150.181.573 |

\*only to connect on fixed side of ram



## RAM JACKS - TELESCOPIC



| SPECIFICATIONS                          | TR 4340 C             | TR 4350 C             |
|-----------------------------------------|-----------------------|-----------------------|
| article number                          | 150.032.039           | 150.032.040           |
| max. working pressure bar / Mpa         | 720 / 72              | 720 / 72              |
| spreading force 1st plunger kN / t      | 217 / 22.1            | 217 / 22.1            |
| spreading force 2nd plunger kN / t      | 81 / 8.3              | 81 / 8.3              |
| retracted / extended length mm          | 303 / 585             | 533 / 1275            |
| spreading stroke 1st plunger mm         | 158                   | 388                   |
| spreading stroke 2nd plunger mm         | 124                   | 354                   |
| weight ready for use CORE™/dual hose kg | 10.7 / 11.8           | 17.4 / 18.5           |
| dimensions (L x W x H) CORE™ mm         | 303 x 133 x 350       | 533 x 133 x 350       |
| dimensions (L x W x H) dual hose mm     | 303 x 133 x 385       | 533 x 133 x 385       |
| EN 13204 CORE™                          | TR217/158-81/124-10.7 | TR217/388-81/354-17.4 |
| EN 13204 dual hose                      | TR217/158-81/124-11.8 | TR217/388-81/354-18.5 |

## RAM JACKS - TELESCOPIC - ACCESSORIES

| description            | art.nr.     |
|------------------------|-------------|
| RAM support HRS 22     | 150.181.011 |
| extension pipe 250 mm* | 150.181.330 |
| extension pipe 450 mm* | 150.181.331 |

\*only connect on fixed side of TR 4340 C.



## Features / Benefits

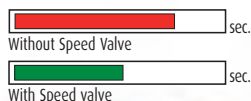
**All models also available in dual hose version**



| model   | art. nr.    |
|---------|-------------|
| RA 4311 | 150.032.051 |
| RA 4313 | 150.032.052 |
| RA 4315 | 150.032.053 |
| TR 4340 | 150.032.049 |
| TR 4350 | 150.032.050 |

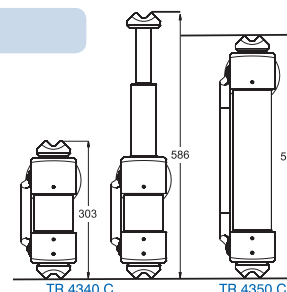
technical details same as CORE™ version, except weight

**Unique Speed Valve in all RAM jacks**



**Working as a team**

- both single plunger and telescopic ram jacks:  
the larger model can be placed in the opening created by the smaller one and continue the spreading job



**Rotating cross heads**



- easy positioning and perfect grip in every situation



## RAM JACKS - SINGLE AND DOUBLE PLUNGER



| SPECIFICATIONS                       |           | RA 4321 C       | RA 4331 C       | RA 4322 C       | RA 4332 C       |
|--------------------------------------|-----------|-----------------|-----------------|-----------------|-----------------|
| article number                       |           | 150.032.045     | 150.032.046     | 150.032.041     | 150.032.047     |
| max. working pressure                | bar / Mpa | 720 / 72        | 720 / 72        | 720 / 72        | 720 / 72        |
| spreading force over full stroke     | kN / t    | 161 / 16.4      | 161 / 16.4      | 161 / 16.4      | 161 / 16.4      |
| retracted / extended length          | mm        | 512 / 762       | 612 / 962       | 745 / 1225      | 945 / 1625      |
| spreading stroke                     | mm        | 1 x 250         | 1 x 350         | 2 x 240         | 2 x 340         |
| pulling force                        | kN / t    | 49.5 / 5.1      | 49.5 / 5.1      | 49.5 / 5.1      | 49.5 / 5.1      |
| weight ready for use CORE™/dual hose | kg        | 11.3 / 12.4     | 13.0 / 14.1     | 15.4 / 16.5     | 18.0 / 19.1     |
| dimensions (L x W x H) CORE™         | mm        | 512 x 122 x 338 | 612 x 122 x 338 | 745 x 122 x 338 | 945 x 122 x 338 |
| dimensions (L x W x H) dual hose     | mm        | 512 x 122 x 373 | 612 x 122 x 373 | 745 x 122 x 373 | 945 x 122 x 373 |
| EN 13204 CORE™                       |           | R161/250-11.3   | R161/350-13.0   | R161/480-15.4   | R161/680-18.0   |
| EN 13204 dual hose                   |           | R161/250-12.4   | R161/350-14.1   | R161/480-16.5   | R161/680-19.1   |



## RAM JACKS - ACCESSORIES

| item | description                       | art. nr.    | qty. in box |
|------|-----------------------------------|-------------|-------------|
| 1    | RAM support HRS 22 (page 19)      | 150.181.011 | -           |
| 2    | rim adapter set, in box (page 19) | 150.182.580 | -           |
| 3    | accessories in box                | 150.582.008 | -           |
| 3a   | cross head                        | 150.033.032 | 2           |
| 3b   | wedge piece                       | 150.181.324 | 1           |
| 3c   | conical tip                       | 150.181.325 | 1           |
| 3d   | base plate                        | 150.181.326 | 2           |
| 3e   | connection piece                  | 150.181.327 | 1           |
| 3f   | extension pipe 165 mm*            | 150.181.321 | 1           |
| 3g   | extension pipe 330 mm*            | 150.181.322 | 1           |
| 3h   | extension pipe 600 mm*            | 150.181.323 | 1           |
| 3i   | set pulling attachments           | 150.582.281 | 1           |
| 4    | set pulling chains, in box        | 150.582.021 | -           |
| 4a   | set pulling chains 3 m + 1.5 m    | 150.582.152 | 1           |
| 5    | carrying handle**                 | 150.013.163 | -           |

\* extension pipes can ONLY be mounted on the fixed base of the single plunger RAM jacks RA 4321 C / RA 4331 C or can be used as a fixed strut

\*\* carrying handle is only for RAM jacks with 2 plungers RA 4322 C / RA 4332 C



All models with unique Speed Valve (see page 8)

## Features / Benefits

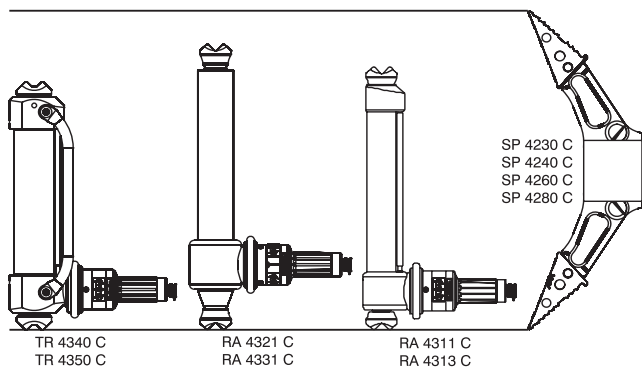
All models also available in dual hose version



| model   | art. nr.    |
|---------|-------------|
| RA 4321 | 150.032.054 |
| RA 4331 | 150.032.061 |
| RA 4322 | 150.032.055 |
| RA 4332 | 150.032.062 |

technical details same as CORE™ version, except weight

Teamwork with all spreaders



- fit in the opening made with each spreader

Full range of accessories



- provides multifunctional applications

- item 1 and 2 see page 19

Extension pipes



- 3 different sizes to bridge large lengths

## MOTOR PUMPS - CORE™ version

| SPECIFICATIONS               |          | personal power   | personal power duo  | duo                  |
|------------------------------|----------|------------------|---------------------|----------------------|
|                              |          | PPU 15 C         | DPU 31 PC           | PU 30 C              |
| article number               |          | 150.152.189      | 150.152.180         | 150.152.197          |
| operating pressure           | bar/Mpa  | 720 / 72         | 720 / 72            | 720 / 72             |
| 4-stroke petrol engine       |          | 2.5 hp - 1.9 kW  | 3.5 hp - 2.6 kW     | 3 hp - 2.2 kW        |
| capacity fuel tank           | cc       | 1250             | 1250                | 1200                 |
| continuous operation         | hours    | 4                | 4                   | 4                    |
| effective capacity oil tank  | cc       | 2000             | 2490                | 3600                 |
| pump type                    |          | two-stage radial | 2 x two-stage axial | 2 x two-stage radial |
| output 1st stage 0-190 bar   | cc / min | 2450             | 2 x 2800-3000       | 2 x 2400             |
| output 2nd stage 190-720 bar | cc / min | 620              | 2 x 550-600         | 2 x 620              |
| weight ready for use         | kg       | 14.2             | 24.9                | 24.4                 |
| dimensions (L x W x H)       | mm       | 423 x 300 x 380  | 600 x 290 x 425     | 500 x 340 x 391      |
| EN 13204                     |          | STO              | MTO                 | MTO                  |

\* a CORE™ pump with connection for 1 tool (PPU 15 C) offers the same operational usability as a traditional dual hose pump with 2 connections

EN 13204: STO = Single Tool Operation; MTO = Multiple Tool Operation; ATO = Alternative Tool Operation

## MOTOR PUMPS - dual hose version

| art. nr.    | model  | weight kg | description       | EN 13204 |
|-------------|--------|-----------|-------------------|----------|
| 150.152.316 | PPU 15 | 15.5      | 1 tool connection | STO      |
| 150.152.315 | TPU 15 | 15.7      | 2 tool connection | ATO      |
| 150.152.355 | PU 30  | 24.9      | 2 tool connection | MTO      |

for technical details see specifications CORE™ version



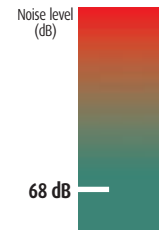
## Features / Benefits

### The ultimate Personal Power® Concept - DPU 31 PC



- impact-resistant material and rubber suspension for motor and pump unit
- spark plug, pump modules and all filling plugs accessible from the outside
- works under an angle according EN
- engine and pump unit protected by side plates; operator shielded from hot parts

### Low noise level of 68 dB according to EN ISO 11820 - DPU 31 PC



- High noise level:**
- burden for victims
  - difficult to communicate at rescue scene
- Low noise level:**
- decreased burden for victims
  - easy to communicate at rescue scene

- more comfortable for victim and better workplace for rescuer

### Lighting above valve block - DPU 31 PC



- easy identification in the dark and facilitates coupling and uncoupling of hoses

### Pump housing of impact-resistant synthetic material; rubber suspension for motor and pump unit (PPU 15 C)



- pump is robust and even works after a one-meter drop!

### Standard with carrying/protection frame - PU 30 C



- prevents damage during storage, transport and use and allows for easy carrying

### Extremely lightweight



- can be carried quickly and easily to even the most inaccessible accident locations

## MOTOR PUMPS - petrol / electric / diesel - CORE™ version



| SPECIFICATIONS                                  | SPU 35 PC / PCF                  | SPU 35 DC / DCF                       | SPU 35 YCF            |
|-------------------------------------------------|----------------------------------|---------------------------------------|-----------------------|
| art.nr. 1 tool connection - carrying handle 1*  | 150.152.593 (SPU 35 PC)          | 150.152.603 (SPU 35 DC)               | --                    |
| art.nr. 1 tool connection - protection frame 2* | 150.152.588 (SPU 35 PCF)         | 150.152.199 (SPU 35 DCF)              | 150.152.594           |
| operating pressure bar/Mpa                      | 720 / 72                         | 720 / 72                              | 720 / 72              |
| motor                                           | petrol<br>2.9 hp-2.1 kW-4-stroke | electric<br>230 VAC-0.9 kW-50 Hz-1 Ph | diesel<br>4 hp - 3 kW |
| capacity fuel tank cc                           | 1500                             | --                                    | 2500                  |
| continuous operation hours                      | 4                                | no limitation                         | 4                     |
| effective capacity oil tank cc                  | 2000                             | 2000                                  | 2000                  |
| output 1st stage 0-190 bar cc / min             | 2400                             | 2400                                  | 2400                  |
| output 2nd stage 190-720 bar cc / min           | 700                              | 700                                   | 700                   |
| weight ready for use kg 1*                      | 25.2                             | 26.4                                  | --                    |
| weight ready for use kg 2*                      | 27.4                             | 27.8                                  | 48.2                  |
| dimensions with frame (L x W x H) mm            | 405 x 345 x 430                  | 405 x 345 x 430                       | 525 x 447 x 522       |
| EN 13204                                        | STO                              | STO                                   | STO                   |

\* article number corresponds with the weight

- a CORE™ pump with connection for 1 tool offers the same operational usability as a traditional dual hose pump with 2 connections  
- EN 13204: STO = Single Tool Operation



SPU 35 PCF



SPU 35 DCF



TPU 35 YF

## MOTOR PUMPS - petrol / electric / diesel - dual hose version

| art. nr.    | model     | weight kg | description                                           | EN 13204 |
|-------------|-----------|-----------|-------------------------------------------------------|----------|
| 150.152.589 | SPU 35 P  | 25.0      | petrol engine - 1 tool connection - carrying handle   | STO      |
| 150.152.586 | SPU 35 PF | 27.2      | petrol engine - 1 tool connection - protection frame  | STO      |
| 150.152.605 | TPU 35 P  | 25.9      | petrol engine - 2 tool connection - carrying handle   | ATO      |
| 150.152.587 | TPU 35 PF | 28.2      | petrol engine - 2 tool connection - protection frame  | ATO      |
| 150.152.026 | SPU 35 D  | 26.2      | electric motor - 1 tool connection - carrying handle  | STO      |
| 150.152.027 | SPU 35 DF | 27.6      | electric motor - 1 tool connection - protection frame | STO      |
| 150.152.028 | TPU 35 D  | 27.1      | electric motor - 2 tool connection - carrying handle  | ATO      |
| 150.152.029 | TPU 35 DF | 28.5      | electric motor - 2 tool connection - protection frame | ATO      |
| 150.152.060 | SPU 35 YF | 48.0      | diesel engine - 1 tool connection - protection frame  | STO      |
| 150.152.064 | TPU 35 YF | 48.9      | diesel engine - 2 tool connection - protection frame  | ATO      |

for technical details see specifications CORE™ version

EN 13204: ATO = Alternative Tool Operation

## ACCESSORIES

| art. nr.    | description                                                 |
|-------------|-------------------------------------------------------------|
| 150.182.115 | selector valve M 201 U for connection of extra rescue tools |

only available in dual hose version



M 201 U

## MOTOR PUMPS - CORE™ version



| SPECIFICATIONS                      | PU 5 C-1         | PU 5 C-2         |
|-------------------------------------|------------------|------------------|
| article number                      | 150.152.428      | 150.152.229      |
| operating pressure bar/Mpa          | 720 / 72         | 720 / 72         |
| 4-stroke petrol engine              | 2 hp - 1.5 kW    | 2 hp - 1.5 kW    |
| capacity fuel tank cc               | 1250             | 1250             |
| continuous operation hours          | 2.5              | 2.5              |
| pump type                           | one stage radial | two stage radial |
| effective capacity oil tank cc      | 530              | 530              |
| output first stage 0-720 bar cc/min | 620              | --               |
| output first stage 0-190 bar cc/min | --               | 2450             |
| output 2nd stage 190-720 bar cc/min | --               | 620              |
| weight ready for use kg             | 11.7             | 12.0             |
| dimensions (L x W x H) mm           | 325 x 269 x 398  | 325 x 269 x 398  |
| EN 13204                            | STO              | STO              |



PU 5 - 2



## MOTOR PUMPS - dual hose version

| art. nr.    | model  | weight kg | EN 13204 |
|-------------|--------|-----------|----------|
| 150.152.343 | PU 5-1 | 11.7      | STO      |
| 150.152.346 | PU 5-2 | 12        | STO      |

for technical details see specifications CORE™ version

## Features SPU 35

- lightweight compact pumps
- various engines available: petrol / electric / diesel
- balanced oil flow
- non-toxic mineral oil

## Features PU 5

- extremely compact, lightweight and perfectly balanced
- enough oil volume to work with all cutters, spreaders, combi tools and most rams
- ideal for rapid intervention



| MOTOR PUMPS                                                |  | DUO - CORE™ version<br>2 tools work simultaneously |                                             | TRIO - CORE™ version<br>3 tools work simultaneously |                                             |
|------------------------------------------------------------|--|----------------------------------------------------|---------------------------------------------|-----------------------------------------------------|---------------------------------------------|
| SPECIFICATIONS                                             |  | DPU 60 PC                                          | DPU 60 DC                                   | MPU 60 PC                                           | MPU 60 DC                                   |
| article number                                             |  | 150.152.200                                        | 150.152.201                                 | 150.152.437                                         | 150.152.439                                 |
| operating pressure                      bar/Mpa            |  | 720 / 72                                           | 720 / 72                                    | 720 / 72                                            | 720 / 72                                    |
| motor                                                      |  | petrol - 4-stroke<br>5.5 hp - 4.1 kW               | electric - 230 VAC<br>1.5 kW - 50 Hz - 1 Ph | petrol - 4-stroke<br>5.5 hp - 4.1 kW                | electric - 230 VAC<br>1.5 kW - 50 Hz - 1 Ph |
| capacity fuel tank                      cc                 |  | 1400                                               | --                                          | 1400                                                | --                                          |
| continuous operation                      hours            |  | 4                                                  | no limitation                               | 4                                                   | no limitation                               |
| effective capacity oil tank                      cc        |  | 4000                                               | 4000                                        | 4000                                                | 4000                                        |
| output 1st stage 0-190 bar                      cc / min   |  | 2 x 2565                                           | 2 x 2290                                    | 3 x 2110                                            | 3 x 1900                                    |
| output 2nd stage 190-720 bar                      cc / min |  | 2 x 660                                            | 2 x 590                                     | 3 x 660                                             | 3 x 590                                     |
| weight ready for use                      kg               |  | 46.1                                               | 45.7                                        | 50.6                                                | 55.5                                        |
| dimensions (L x W x H)                      mm             |  | 500 x 372 x 497                                    | 500 x 372 x 497                             | 500 x 372 x 497                                     | 500 x 372 x 497                             |
| EN 13204                                                   |  | MTO (Multiple Tool Operation)                      |                                             | MTO (Multiple Tool Operation)                       |                                             |
| ALSO AVAILABLE:                                            |  |                                                    |                                             |                                                     |                                             |
| petrol engine with electric start                          |  | DPU 60 PXC                                         | 150.152.212                                 | MPU 60 PXC                                          | 150.152.438                                 |
| electric motor 380-440 VAC - 50 Hz - 3 Ph                  |  | DPU 60 EC                                          | 150.152.202                                 |                                                     |                                             |



DPU 60 PC



MPU 60 DC

## MOTOR PUMPS - DUO / TRIO - dual hose version

| art. nr.    | model     | weight kg | description                |
|-------------|-----------|-----------|----------------------------|
| 150.152.232 | DPU 60 P  | 47.5      | petrol engine              |
| 150.152.231 | DPU 60 PX | 50.9      | petrol - electric start    |
| 150.152.233 | DPU 60 D  | 47.1      | electric motor 230 VAC     |
| 150.152.234 | DPU 60 E  | 48.9      | electric motor 380-440 VAC |
| 150.152.332 | MPU 60 P  | 51.6      | petrol engine              |
| 150.152.333 | MPU 60 PX | 55.0      | petrol - electric start    |
| 150.152.334 | MPU 60 D  | 56.5      | electric motor 230 VAC     |

for technical details see specifications CORE™ version

## MOTOR PUMPS - DUO WITH 4 CONNECTIONS - dual hose version

| art. nr.    | model     | weight kg | description                |
|-------------|-----------|-----------|----------------------------|
| 150.152.252 | XPU 60 P  | 48.6      | petrol engine              |
| 150.152.251 | XPU 60 PX | 52.0      | petrol - electric start    |
| 150.152.253 | XPU 60 D  | 48.2      | electric motor 230 VAC     |
| 150.152.254 | XPU 60 E  | 50.0      | electric motor 380-440 VAC |

for technical details see specifications DUO pumps CORE™ version

## HOSE REELS:

- single hose reels CORE™ available in left and right version with hoses length 15, 20 or 25 m; colours orange or blue
- double hose reels CORE™ available with hoses length 15, 20 or 25 m; colours orange (left side) and blue (right side)



HR 4420 CLO

HR 4520 COB

- single hose reels dual version available in left and right version with hoses length 15, 20, 25 or 30 m; colours orange (left version) and green (right version)
- double hose reels dual version available with hoses length 15, 20, 25 or 30 m; colours orange/green or blue/red
- all motor pumps (DPU/MPU) in CORE™ version can be delivered with built-on hose reels with hoses length 15, 20 or 25 m; colours orange/blue
- all motor pumps (DPU) in dual hose version can be delivered with hoses length 15, 20, 25 or 30 m; colours orange/green
- max. hose length for Trio pumps (MPU) in dual hose version is 25 m; colours orange/green

DPU 61 PC 20



## CORE™ HOSES - inclusive hose binder

| model   | art.nr.     | length m | weight kg | colour |
|---------|-------------|----------|-----------|--------|
| C 05 OU | 150.570.042 | 5        | 2.5       | orange |
| C 10 OU | 150.570.043 | 10       | 4.7       | orange |
| C 15 OU | 150.570.044 | 15       | 6.9       | orange |
| C 05 BU | 150.570.045 | 5        | 2.5       | blue   |
| C 10 BU | 150.570.046 | 10       | 4.7       | blue   |
| C 15 BU | 150.570.047 | 15       | 6.9       | blue   |
| C 05 GU | 150.570.057 | 5        | 2.5       | green  |
| C 10 GU | 150.570.058 | 10       | 4.7       | green  |
| C 15 GU | 150.570.059 | 15       | 6.9       | green  |
| C 05 ZU | 150.570.060 | 5        | 2.5       | black  |
| C 10 ZU | 150.570.061 | 10       | 4.7       | black  |
| C 15 ZU | 150.570.062 | 15       | 6.9       | black  |



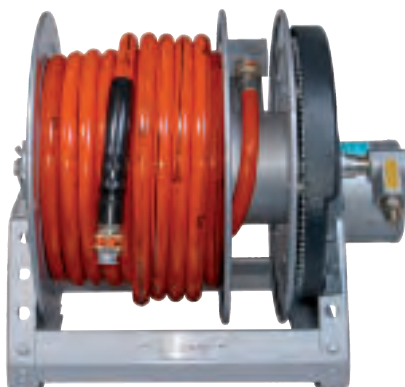
## SINGLE HOSES

- with quick couplers with lock-ring security and anti-kink springs on both ends

| model   | art.nr.     | length m | weight kg | colour |
|---------|-------------|----------|-----------|--------|
| B 1 SOU | 150.570.063 | 1        | 1.0       | orange |
| B 2 SOU | 150.572.035 | 2        | 1.3       | orange |
| B 3 SOU | 150.572.033 | 3        | 1.6       | orange |
| B 3 SGU | 150.572.034 | 3        | 1.6       | green  |
| B 5 SOU | 150.572.058 | 5        | 2.3       | orange |
| B 5 SGU | 150.572.059 | 5        | 2.3       | green  |

## DUAL HOSES - BUNDLED

| model      | art.nr.     | length m | weight kg | colour |
|------------|-------------|----------|-----------|--------|
| BVL 5 SOU  | 150.572.055 | 5        | 4.5       | orange |
| BVL 5 SGU  | 150.572.056 | 5        | 4.5       | green  |
| BVL 5 SRU  | 150.572.123 | 5        | 4.5       | red    |
| BVL 5 SBU  | 150.572.126 | 5        | 4.5       | blue   |
| BVL 10 SOU | 150.572.111 | 10       | 7.8       | orange |
| BVL 10 SGU | 150.572.112 | 10       | 7.8       | green  |
| BVL 10 SRU | 150.572.124 | 10       | 7.8       | red    |
| BVL 10 SBU | 150.572.127 | 10       | 7.8       | blue   |
| BVL 15 SOU | 150.572.121 | 15       | 11.0      | orange |
| BVL 15 SGU | 150.572.122 | 15       | 11.0      | green  |
| BVL 15 SRU | 150.572.125 | 15       | 11.0      | red    |
| BVL 15 SBU | 150.572.128 | 15       | 11.0      | blue   |
| BVL 20 SOU | 150.572.062 | 20       | 14.3      | orange |
| BVL 20 SGU | 150.572.061 | 20       | 14.3      | green  |



- electric rewind hose reel; various models available

## MOTOR PUMPS CRM - Compact Rescue Module

| SPECIFICATIONS               |          | DPU 60 PC CRM                        | DPU 60 DC CRM                               |
|------------------------------|----------|--------------------------------------|---------------------------------------------|
| article number               |          | depends on version *                 |                                             |
| operating pressure           | bar/Mpa  | 720 / 72                             | 720 / 72                                    |
| motor                        |          | petrol - 4-stroke<br>5.5 hp - 4.1 kW | electric - 230 VAC<br>1.5 kW - 50 Hz - 1 Ph |
| capacity fuel tank           | cc       | 1400                                 | --                                          |
| continuous operation         | hours    | 4                                    | no limitation                               |
| effective capacity oil tank  | cc       | 4000                                 | 4000                                        |
| output 1st stage 0-190 bar   | cc / min | 2 x 2565                             | 2 x 2290                                    |
| output 2nd stage 190-720 bar | cc / min | 2 x 660                              | 2 x 590                                     |
| weight ready for use         | kg       | depends on version *                 |                                             |
| dimensions (L x W x H)       | mm       | depends on version *                 |                                             |
| EN 13204                     |          | MTO (Multiple Tool Operation)        |                                             |

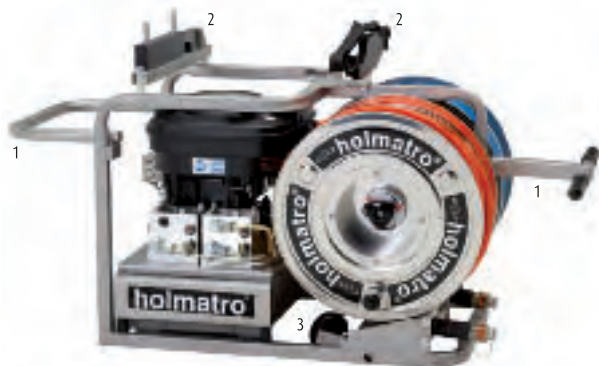
\* ask your dealer for detailed information

ABOVE CRM PUMPS ARE ALSO AVAILABLE IN DUAL HOSE VERSION

### Build your own Compact Rescue Module:

- choose one of the above pumps
- choose the length of hoses for the hose reel - available are:
  - in CORE™ version 15 or 20 m, colours orange/blue
  - in dual hose version 15, 20 or 25 m, colours orange/green
- add following optional accessories (see picture):
  - 1 = carrying handle
  - 2 = tool support
  - 3 = folding wheel set

CRM pumps are delivered completely mounted with hoses and accessories



DPU 60 PC CRM 20 CWT



DPU 60 DC CRM 20 CWT with tools

| HAND / FOOT PUMPS           | single hose                 | dual hose          |
|-----------------------------|-----------------------------|--------------------|
| SPECIFICATIONS              | HTW 300 ABU                 | HTW 700 ABU        |
| article number              | 150.449.001                 | 150.442.013        |
| operating pressure          | bar/Mpa                     | 720 / 72           |
| source of energy            | hand                        | hand               |
| effective capacity oil tank | cc                          | 300                |
| output 1st stage            | cc                          | up to 30 bar 5 cc  |
| output 2nd stage            | cc                          | up to 720 bar 1 cc |
| output 3rd stage            | cc                          | --                 |
| weight ready for use        | kg                          | 3.8                |
| dimensions (L x W x H)      | mm                          | 500 x 90 x 115     |
| EN 13204                    | STO (Single Tool Operation) |                    |

| CORE™                       |                      |                      |
|-----------------------------|----------------------|----------------------|
| HTW 1800 C                  | FTW 1800 C           | HTT 1800 UC          |
| 150.142.021                 | 150.142.022          | 150.142.018          |
| 720 / 72                    | 720 / 72             | 720 / 72             |
| hand                        | foot                 | hand                 |
| 1800                        | 1800                 | 1800                 |
| up to 45 bar 28 cc          | up to 45 bar 28 cc   | up to 45 bar 28 cc   |
| up to 720 bar 2.3 cc        | up to 720 bar 2.3 cc | up to 260 bar 7.6 cc |
| --                          | --                   | up to 720 bar 3.1 cc |
| 11.2                        | 11.7                 | 17.2                 |
| 765 x 240 x 236             | 765 x 240 x 223      | 856 x 400 x 214      |
| STO (Single Tool Operation) |                      |                      |

### ALSO AVAILABLE IN DUAL HOSE VERSION:

| art. nr.    | model       | weight kg | dimensions (LxWxH) mm |
|-------------|-------------|-----------|-----------------------|
| 150.142.003 | HTW 1800 BU | 11.5      | 765 x 240 x 218       |
| 150.142.000 | FTW 1800 BU | 12.0      | 765 x 240 x 218       |
| 150.142.007 | HTT 1800 U  | 17.2      | 855 x 400 x 205       |

| AIR OPERATED PUMP                      | CORE™         | dual hose       |
|----------------------------------------|---------------|-----------------|
| SPECIFICATIONS                         | AHS 1400 FDUC | AHS 1400 FDU    |
| article number                         | 150.152.584   | 150.602.001     |
| operating pressure                     | bar/Mpa       | 720 / 72        |
| max. air pressure                      | bar           | 8               |
| effective capacity oil tank            | cc            | 1400            |
| output unloaded                        | cc / min      | 960             |
| output loaded                          | cc / min      | 410             |
| air-consumption unloaded               | l / min       | 700             |
| air-consumption loaded                 | l / min       | 580             |
| weight ready for use                   | kg            | 6.9             |
| dimensions (L x W x H)                 | mm            | 317 x 125 x 200 |
| EN 13204 : STO = Single Tool Operation |               |                 |



## POWERSHORE™ - struts with hydraulic cylinder

| model        | art. nr.    | locking system | retracted length mm | stroke mm | weight kg | working pressure bar / Mpa | force at working pressure kN / t | oil contents at max. stroke cc |
|--------------|-------------|----------------|---------------------|-----------|-----------|----------------------------|----------------------------------|--------------------------------|
| HS 1 Q 5 FL  | 150.011.547 | quick lock     | 632                 | 252       | 10.3      | 720 / 72                   | 99 / 10.1                        | 346                            |
| HS 1 Q 10 FL | 150.011.536 | quick lock     | 1092                | 252       | 13        | 720 / 72                   | 99 / 10.1                        | 346                            |
| HS 1 L 5+    | 150.011.543 | lock nut       | 575                 | 252       | 9.2       | 720 / 72                   | 99 / 10.1                        | 346                            |
| HS 1 L 10+   | 150.011.537 | lock nut       | 1035                | 252       | 11.9      | 720 / 72                   | 99 / 10.1                        | 346                            |

## POWERSHORE™ - struts with air cylinder

| model        | art. nr.    | locking system | retracted length mm | stroke mm | weight kg | working pressure bar / Mpa | force at working pressure kN / t | max. air/water contents in litres |
|--------------|-------------|----------------|---------------------|-----------|-----------|----------------------------|----------------------------------|-----------------------------------|
| AS 3 Q 5 FL  | 150.011.546 | quick lock     | 632                 | 252       | 8.4       | 8                          | 4 / 0.4                          | 20.4 / 2.3                        |
| AS 3 Q 10 FL | 150.011.545 | quick lock     | 1092                | 252       | 11.2      | 8                          | 4 / 0.4                          | 20.4 / 2.3                        |
| AS 3 L 5+    | 150.011.532 | lock nut       | 575                 | 252       | 7.3       | 8                          | 4 / 0.4                          | 20.4 / 2.3                        |
| AS 3 L 10+   | 150.011.531 | lock nut       | 1035                | 252       | 10.1      | 8                          | 4 / 0.4                          | 20.4 / 2.3                        |

**Quick lock with integrated spacer:** plunger with automatic locking mechanism that locks in steps of 9 mm. Retracting the plunger is only possible after releasing the locking mechanism. The integrated spacer, a spring operated flex mechanism with 13 mm stroke, is used to overcome one 9 mm step of the quick lock system and creates a max. pretension in the strut of 4.0 kN.

**Lock Nut:** plunger with thread and lock nut. When the plunger is extended the lock nut can be secured. The pressure can then be released. Axial displacement per rotation is 16.5 mm.

All struts are equipped on both sides with a female snap-lock system. Cylinders are single acting with spring return. All struts can be used with extension pipes and saddles.



## ACCESSORIES - to be used in combination with struts with hydraulic cylinder

| item | description                                                                                                                                                          | model       | art. nr.    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| -    | hand pump, oil contents 700 cc, weight ready for use 9.9 kg, pressure gauge 0-720 bar, rubber protection cover for pressure gauge, hose 3 metres with quick-coupler. | HTW 700 APS | 150.012.504 |

HTW 700 APS



## ACCESSORIES - to be used in combination with struts with air cylinder

| item | description                                                               | model      | art. nr.    |
|------|---------------------------------------------------------------------------|------------|-------------|
| 1    | single control unit with safety valve                                     | SCV 10 U   | 350.582.042 |
| 2    | double control unit with safety valves                                    | DCV 10 U   | 350.582.034 |
| 3    | pressure reducer with hose of 2 metres, suitable for both 200 and 300 bar | PRV 823 AU | 350.182.002 |
| 4    | air bottle 6 litres, 300 bar                                              | --         | 350.581.096 |
| 5    | air hose 5 metres, colour yellow                                          | AH 5 YU    | 350.572.006 |
| 5    | air hose 5 metres, colour blue                                            | AH 5 BU    | 350.572.007 |
| 5    | air hose 10 metres, colour yellow                                         | AH 10 YU   | 350.572.009 |
| 5    | air hose 10 metres, colour blue                                           | AH 10 BU   | 350.572.011 |



## POWERSHORE™ - mechanical struts

| model     | art. nr.    | locking system | retracted length mm | stroke mm | weight kg |
|-----------|-------------|----------------|---------------------|-----------|-----------|
| MS 2 L 2+ | 150.011.538 | thread         | 250                 | 120       | 3,5       |
| MS 2 L 5+ | 150.011.533 | lock nut       | 575                 | 252       | 6,7       |

**Thread:** plunger with thread at both ends. When the plunger is extended the thread is self-retaining. Axial displacement per rotation is 16.5 mm.

**Lock nut:** plunger with thread and a lock nut. When the plunger is extended the lock nut can be secured. Axial displacement per rotation is 16.5 mm.



SX 1



SX 2



SX 5



FX 1

## EXTENSION PIPES / CONNECTOR

| model | art. nr.    | extension mm | colour code | weight kg | outside Ø mm | working load kN / t * |
|-------|-------------|--------------|-------------|-----------|--------------|-----------------------|
| SX 1  | 150.011.501 | 125          | white       | 1.5       | 90           | 99 / 10.1             |
| SX 2  | 150.011.502 | 250          | blue        | 1.9       | 90           | 99 / 10.1             |
| SX 5  | 150.011.503 | 500          | yellow      | 2.8       | 90           | 99 / 10.1             |
| SX 10 | 150.011.504 | 1000         | green       | 4.6       | 90           | 99 / 10.1             |
| SX 15 | 150.011.506 | 1500         | red         | 6.4       | 90           | 99 / 10.1             |
| FX 1  | 150.011.505 | --           | --          | 1.4       | 89           | 99 / 10.1             |

\* depending on total length - see manual

**Extension pipes** with male snap-lock on one side and female snap-lock on the other side.

**Connector FX 1** with female snap-lock on both sides. To connect the male end of an extension pipe with one of the saddles. In this way it is possible to make a fixed strut.





## ACCESSORIES

All accessories to be used on struts and extension pipes are equipped with a male snap-lock system.

| description                                                                                                                                       | art. nr.    |                                                                                     | description                                                                                                                              | art. nr.    |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
| Saddle - aluminium. For support against a flat surface; 0.3 kg, Ø 89 mm.                                                                          | 150.011.509 |    | Cross head. For use on many kinds of surfaces; 1.1 kg.                                                                                   | 150.011.523 |    |
| Saddle - aluminium. For support against a flat surface, with fixing holes; 0.8 kg, 150 x 150 mm.                                                  | 150.011.541 |    | Pointed head. For use in for example narrow gaps; 1.2 kg; Ø 89 mm.                                                                       | 150.011.524 |    |
| Tilting saddle - aluminium. For support on uneven or tilting surfaces. Max. angle 45° in all directions; 1.7 kg, 95 x 95 mm.                      | 150.182.038 |    | Support plate. Can support 3 swivel heads and up to 3 tensioning belts to create a stable triangle; 2.8 kg.                              | 150.011.519 |    |
| Tilting saddle - aluminium. For support on uneven or tilting surfaces; with fixing holes. Max. angle 45° in all directions; 2.5 kg, 150 x 150 mm. | 150.182.048 |    | Support plate - zinc plated steel. Can be nailed to wooden plates to support 2 swivel heads in e.g. a trench; 0.9 kg; 280 x 110 x 75 mm. | 150.011.549 |    |
| Beam support. For use with beams up to 150 mm; with fixing holes; 1.7 kg.                                                                         | 150.011.513 |    | Tensioning belt. Length 4.0 m, width 35 mm, weight 1.4 kg, load 10 kN.                                                                   | 390.511.073 |    |
| Beam support. For use with beams up to 100 mm; with fixing holes; 1.2 kg.                                                                         | 150.011.514 |    | Adjustable hook wrench. To create a pre-load with the MS 2 L 2+. Two pieces are advised.                                                 | 150.581.689 |    |
| L-support. For use with very wide beams; with fixing holes; 1.0 kg.                                                                               | 150.011.520 |   | Rope with carabine hook. To lower struts, e.g. into a trench.                                                                            | 150.011.548 |   |
| Swivel head - aluminium. Can be placed in almost any position and against each other for mutual support; 2.0 kg.                                  | 150.182.046 |  | Rubber anti-roll block. Prevents struts and extension pipes rolling on uneven surfaces and protects against dirt and damage.             | 150.113.057 |  |
| V-block - aluminium. For support of or against tubes; 0.7 kg; Ø 89 mm.                                                                            | 150.011.516 |  | Storage / carrying bag for accessories.                                                                                                  | 150.011.005 |  |
| V-block - aluminium. For support of or against tubes; 1.7 kg; opening x width 141 x 100 mm.                                                       | 150.011.522 |  | Storage / carrying bag for struts and extension pipes.                                                                                   | 150.011.006 |  |
| Cone head. For support on concrete or steel surfaces; 0.5 kg; Ø 89 mm.                                                                            | 150.011.517 |  |                                                                                                                                          |             |                                                                                       |

## Features / Benefits

### Snap-lock system



- all items can be connected within seconds

### Reflective colour coding of extension pipes



- avoids miscommunication
- easy to spot, especially in the dark

### 10 tons hydraulic strut



- not only shoring but also lifting

**Numerous fields of application:** - vehicle extrication - industrial accidents - Urban Search and Rescue - trench rescue - naval damage control

**Standard sets:** ask your local dealer or check [www.holmatro.com](http://www.holmatro.com)



| SELF CONTAINED RESCUE TOOLS   | BATTERY TOOLS     |                 | HAND-OPERATED TOOLS |                 |
|-------------------------------|-------------------|-----------------|---------------------|-----------------|
|                               | COMBI             | CUTTER          | COMBI               | CUTTER          |
| SPECIFICATIONS                | BCT 4120          | BCU 4010 GP     | HCT 4120            | HCU 4010 GP     |
| article number                | 150.052.008       | 150.052.007     | 150.012.146         | 150.012.147     |
| max. working pressure bar/Mpa | 720 / 72          | 720 / 72        | 720 / 72            | 720 / 72        |
| spreading mm                  | 268               | -               | 268                 | -               |
| max. spreading force kN / t   | 200 / 20.4        | -               | 200 / 20.4          | -               |
| min. spreading force kN / t   | 26 / 2.7          | -               | 26 / 2.7            | -               |
| cutting force kN / t          | 247 / 25.2        | 254 / 25.9      | 247 / 25.2          | 254 / 25.9      |
| round bar ø mm                | 24                | 24              | 24                  | 24              |
| squeezing force kN / t        | 46 / 4.7          | -               | 46 / 4.7            | -               |
| pulling distance mm           | 181               | -               | 181                 | -               |
| pulling force kN / t          | 61 / 6.2          | -               | 61 / 6.2            | -               |
| weight, ready for use kg      | 15.3              | 14.7            | 10.9                | 10.3            |
| dimensions (L x W x H) mm     | 712 x 305 x 230   | 659 x 305 x 230 | 698 x 205 x 170     | 645 x 205 x 170 |
| EN 13204                      | BK26.4/268-E-15.3 | AC116-D-14.7    | BK26.4/268-E-10.9   | AC116-D-10.3    |

for pulling attachments and pulling chains of hand-operated combi HCT 4120 see accessories battery tools below



BCT 4120



BCU 4010 GP



HCT 4120



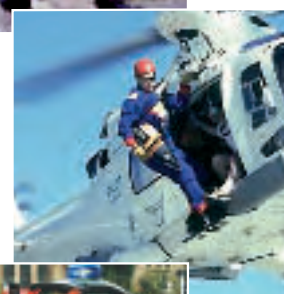
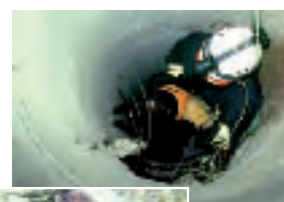
HCU 4010 GP

## Features / Benefits

- Cordless
- Compact
- Portability
- Light weight
- Well balanced



| ACCESSORIES |                      |                                                                                                                                                                                 |             |
|-------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| description |                      |                                                                                                                                                                                 | art. nr.    |
|             | battery              | 24-V, NiCd, 2.4 Ah battery.                                                                                                                                                     | 150.553.014 |
|             | battery              | 24-V, NiMH, 3.0 Ah battery for extended run time.                                                                                                                               | 150.553.050 |
|             | charger              | 110 - 120-V, suitable for charging both 2.4 Ah and 3.0 Ah batteries. Full recharge in one hour.                                                                                 | 150.553.007 |
|             | charger              | 220 - 230-V, suitable for charging both 2.4 Ah and 3.0 Ah batteries. Full recharge in one hour.                                                                                 | 150.553.008 |
|             | vehicle charger      | 12-V, suitable for charging both 2.4 Ah and 3.0 Ah batteries. To charge battery using a vehicle's 12-V power source.                                                            | 150.553.006 |
|             | power cable          | 12 to 24-V, length 5 m. Provides tool with unlimited run time using a vehicle's power source.                                                                                   | 150.553.045 |
|             | power cable          | 24-V, length 10 m. Provides tool with unlimited run time using a vehicle's power source.                                                                                        | 150.553.052 |
|             | carrying strap       | To carry the tool safely. Padded and provided with quick release clamps to attach when needed.                                                                                  | 150.553.055 |
|             | battery pouch        | Stores one battery. Equipped with carrying strap, can be attached to a belt.                                                                                                    | 150.553.113 |
|             | carrying bag         | Holds tool, spare batteries and accessories. Made of wear-resistant non-absorbent nylon.                                                                                        | 150.553.054 |
|             | carrying frame       | Rugged carrying frame to hold a tool and 2 spare batteries. Weight excl. harness: 4.0 kg.                                                                                       | 150.553.048 |
|             | carrying harness     | For easy carrying of tool over long distances or to remote areas.                                                                                                               | 150.553.115 |
|             | Pelican® box         | Extremely durable transporting and storage box. Waterproof, floats and keeps pressure inside box constant. Holds tool, 2 spare batteries, pulling chains and other accessories. | 150.553.053 |
|             | set pulling chains   | Consists of chains 1.5 and 3.0 m and 2 shortening hooks. For combi tool model BCT 4120 only, not for cutter model BCU 4010 GP.                                                  | 150.582.152 |
|             | set pulling adapters | To fit over jaw tips, complete with hooks. For model BCT 4120 only, not for cutter model BCU 4010 GP.                                                                           | 150.582.551 |





## DOOR OPENERS

| SPECIFICATIONS             | HDR 50       | HDO 100       |
|----------------------------|--------------|---------------|
| article number             | 150.061.002  | 150.062.008 * |
| working pressure bar / Mpa | 720 / 72     | 720 / 72      |
| spreading force kN / t     | 47 / 4.8     | 98 / 10       |
| pushing force kN / t       | 51 / 5.2     | --            |
| weight ready for use kg    | 11.0         | 6.6           |
| PUMPS**                    | HTW 700 ADCV | HTW 300 ABU   |
| article number             | 150.062.009  | 150.449.001   |
| weight ready for use kg    | 8            | 3.8           |

\* With fixed coupler. Also available with rotating hose connection and delivered in synthetic carrying/storage box. Art.nr. 150.062.007.

\*\* see also page 13

## ACCESSORIES

| item | description                                                                                                                                                         | HDR 50      |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1    | wedge head. To be used on narrow or slippery (steel) doorposts                                                                                                      | 150.063.010 |
| 2    | grip head with extra long tooth (1 piece). Provides extra grip on narrow doorposts. The extra long tooth penetrates in the crack between the door and the doorpost. | 150.063.011 |
| 3    | extension piece. To be mounted on the end of the spreading jack to enlarge the maximum reach.                                                                       | 150.063.031 |
| 4    | steel pushing plate. For weak, easily bending doors, open structure doors, gates, etc.                                                                              | 150.063.032 |
| 5    | operating set DCV 720 U with hose 2 m. In case another single acting pump is used.                                                                                  | 150.061.005 |

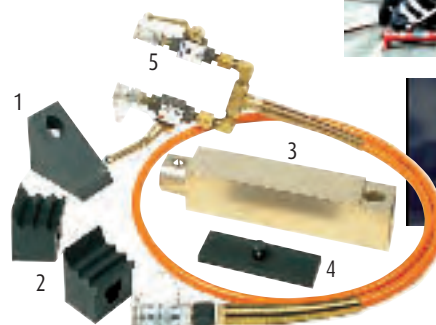


HDR 50



HDO 100

stroke 130 mm



## MINICUTTER

| SPECIFICATIONS               | HMC 8 U  |
|------------------------------|----------|
| operating pressure bar / Mpa | 720 / 72 |
| cutting force kN / t         | 79 / 8   |
| round bar mm                 | 15       |
| depth / width of jaw mm      | 40 / 40  |
| weight ready for use kg      | 3.1      |



## MINICUTTER in various versions

| description                                                                                   | art. nr.    |
|-----------------------------------------------------------------------------------------------|-------------|
| 1 with coupler                                                                                | 150.012.025 |
| 2 with 30 cm pigtail hose. In synthetic case                                                  | 150.012.026 |
| 3 with 360° rotation elbow and 30 cm pigtail hose. In synthetic case.                         | 150.012.027 |
| 4 with 360° rotation elbow and handpump HTW 300 ABU mounted with 2 m hose. In synthetic case. | 150.012.028 |



## RE-BAR CUTTER

| SPECIFICATIONS               | CU 4006 C   |
|------------------------------|-------------|
| article number               | 150.012.180 |
| operating pressure bar / Mpa | 720 / 72    |
| cutting force kN / t         | 167 / 17    |
| cutting capacity* mm         | 16          |
| opening on tips mm           | 25          |
| depth of blades mm           | 28          |
| weight ready for use kg      | 7           |

\* steel hardness 40 RC



CU 4006 C





## WEDGE JACK



PW 4624 C

| art. nr.                                   |           | 150.062.046 |
|--------------------------------------------|-----------|-------------|
| operating pressure                         | bar / Mpa | 720 / 72    |
| min. insertion height                      | mm        | 6           |
| max. lifting height                        | mm        | 50          |
| spreading force                            | kN / t    | 235 / 24    |
| weight ready for use                       | kg        | 8.2         |
| dual hose version - PW 3624+ (150.012.078) |           |             |



12 t



## TOE JACK

TJ 3610

| art. nr.                        |           | 150.012.049 |
|---------------------------------|-----------|-------------|
| operating pressure              | bar / Mpa | 720 / 72    |
| max. capacity (on saddle)       | kN / t    | 118 / 12    |
| max. force (on toe)             | kN / t    | 98 / 10     |
| lifting height / plunger stroke | mm        | 250         |
| closed height                   | mm        | 448         |
| min. insertion height toe       | mm        | 56          |
| weight ready for use            | kg        | 20.5        |

## ALUMINIUM JACKS

HLJ 50 A 6

HLJ 50 A 10

| art. nr.             |           | 150.112.060 | 150.112.059 |
|----------------------|-----------|-------------|-------------|
| operating pressure   | bar / Mpa | 720 / 72    | 720 / 72    |
| lifting capacity     | kN / t    | 510 / 52    | 510 / 52    |
| closed height        | mm        | 150         | 196         |
| stroke               | mm        | 61          | 104         |
| weight ready for use | kg        | 7           | 8.7         |



## PIPE SQUEEZER

HPS 60 AU

| art. nr.                 |           | 150.182.024     |
|--------------------------|-----------|-----------------|
| operating pressure       | bar / Mpa | 720 / 72        |
| max. squeezing force     | kN / t    | 147 / 15        |
| max. Ø tube (outside)    | mm        | 60              |
| max. wall thickness tube | mm        | 4               |
| dimensions (L x W x H)   | mm        | 420 x 210 x 150 |
| weight ready for use     | kg        | 8.8             |



## STEEL CABLE CUTTERS

| SPECIFICATIONS            |           | HWC 16 U    | HWC 20 U    | HWC 32 U    |
|---------------------------|-----------|-------------|-------------|-------------|
| article number            |           | 150.522.016 | 150.522.020 | 150.522.032 |
| working pressure          | bar / Mpa | 720 / 72    | 720 / 72    | 720 / 72    |
| capacity                  | kN / t    | 54 / 5.5    | 153 / 15.6  | 262 / 26.7  |
| max. jaw opening          | ø / mm    | 20          | 50          | 32          |
| capacity steel cable 6x19 | ø / mm    | 16          | 20          | 32          |
| capacity solid steel      | ø / mm    | 13          | 19          | 25          |
| capacity ground cable     | ø / mm    | 20          | 50          | 32          |
| weight ready for use      | kg        | 2.2         | 9.0         | 9.8         |



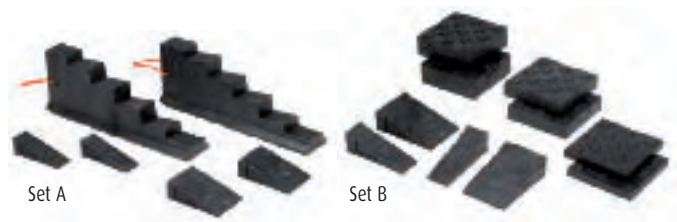
## ELECTRIC CABLE CUTTERS

| SPECIFICATIONS           |           | HCC 85 U    | HCC 100 U   |
|--------------------------|-----------|-------------|-------------|
| article number           |           | 150.522.085 | 150.522.100 |
| working pressure         | bar / Mpa | 720 / 72    | 720 / 72    |
| capacity                 | kN / t    | 51 / 5.2    | 91 / 9.2    |
| max. jaw opening         | ø / mm    | 85          | 100         |
| capacity ground cable    | ø / mm    | 50          | 75          |
| capacity telephone cable | ø / mm    | 85          | 100         |
| weight ready for use     | kg        | 7.2         | 13.3        |



## CHOCKS & BLOCKS

| Set A | 150.562.010 consists of | Set B | 150.562.004 consists of |
|-------|-------------------------|-------|-------------------------|
|       | 2 x step chock          |       | 2 x lock block low      |
|       | 2 x wedge small         |       | 2 x lock block medium   |
|       | 2 x wedge large         |       | 2 x lock block high     |
|       |                         |       | 2 x wedge small         |
|       |                         |       | 2 x wedge large         |



- made of recycled polyethylene
- water- and oil-resistant
- virtually indestructible
- higher allowable surface pressure than wood
- non-slip interlocking profile
- 20% higher friction coefficient than wood



## RAM SUPPORT

| model                  | HRS 22      |
|------------------------|-------------|
| article number         | 150.181.011 |
| max. load              | kN / t      |
| dimensions (L x W x H) | mm          |
| weight ready for use   | kg          |

- offers a stable ramming platform
- suitable for every door post
- different ramming platforms



## RIM ADAPTER

| art. nr.                              | 150.182.580 |
|---------------------------------------|-------------|
| weight set, incl. case                | kg          |
| only with RA 4321-22 C / RA 4331-32 C |             |

- lifts rear wheel in a safe way into its own suspension
- rescuer does not have to move under the vehicle
- can also be used to push away a steering column of a truck



## PROTECTION COVERS

| art. nr.             | SEP 5       | SEP 10      |
|----------------------|-------------|-------------|
|                      | 150.581.676 | 150.581.677 |
|                      | dimensions  | weight      |
|                      | cm          | gr          |
|                      | contents    | contents    |
| cover with Velcro    | 26 x 30     | 145         |
|                      | 2 x         | 4 x         |
| blanket with magnets | 60 x 60     | 465         |
|                      | 2 x         | 4 x         |
|                      | 150 x 60    | 1050        |
|                      | 1 x         | 2 x         |

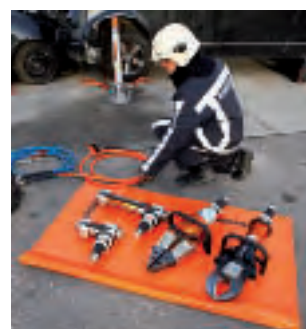
- wear-resistant, fire-retardant polyester
- water-repellant
- blankets with magnets for instant attachment to a vehicle
- washable (magnets are removable)



## TOOL STATION

| art. nr.   |    | 150.182.043 | 150.182.044 |
|------------|----|-------------|-------------|
| dimensions | cm | 200 x 150   | 250 x 200   |
| weight     | kg | 2.3         | 3.7         |

- durable, water-repellent PVC-coated polyester
- foldable so easy to carry and easy to store
- striking orange colour





## GLAS-MASTER

| art. nr.                                              |    | 150.182.060    |
|-------------------------------------------------------|----|----------------|
| weight ready for use                                  | kg | 1              |
| dimensions (L x W x H)                                | mm | 420 x 245 x 35 |
| delivered inclusive a window punch and mounting clips |    |                |

- FAST
- EFFECTIVE

- VERSATILE
- SAFE



## GLASS CUTTER

| model                                                         |    | HGC 7       |
|---------------------------------------------------------------|----|-------------|
| article number                                                |    | 150.012.410 |
| weight ready for use                                          | kg | 2.5         |
| delivered with window punch in synthetic carrying/storage box |    |             |

- SAFE - catches a very big part of the glass fragments and dust
- QUICK - cuts glued or laminated windshields in a very short time
- SILENT - hand-operated ratchet mechanism



## WINDOW PUNCH

| art. nr.                                |    | 980.005.045                               |
|-----------------------------------------|----|-------------------------------------------|
| weight ready for use                    | gr | 55                                        |
| material                                |    | anodized aluminium and heat-treated steel |
| attachment to clothing by means of clip |    |                                           |

- FAST
- EFFECTIVE
- SAFE



## SECUNET®

| art. nr.             |    | 350.182.005 |
|----------------------|----|-------------|
| weight ready for use | gr | 250         |

- easy to install, within seconds
- lightweight and compact
- for all passenger cars and modern vans
- in synthetic storage box with wall-mounting bracket



## SEATBELT CUTTER

| art. nr.           |    | 980.005.022  |
|--------------------|----|--------------|
| dimensions (L x W) | mm | 154 x 44 x 5 |

- safe, cutting blade fully covered
- can be used on every seat belt
- with Velcro for attachment at any spot



## HOSE BINDER

| number per set |  | art. nr.    |
|----------------|--|-------------|
| 5 pieces       |  | 150.182.039 |
| 20 pieces      |  | 150.182.040 |

- easy to store and to carry



## PROTECTION SHIELD

| art. nr.             |    | 150.182.045 |
|----------------------|----|-------------|
| dimensions (L x W)   | mm | 90 x 50     |
| weight ready for use | kg | 2.9         |

- ensures optimal safety for the victim
- made of thick yet flexible PVC material
- transparent for continuous monitoring the victim
- with 4 handles to hold in any position





## LIFTING BAGS - max. working pressure 8 bar

| model  | art. nr.    | max. effective lifting force kN/t | max. inflation height mm | dimensions (L x W) mm | weight kg |
|--------|-------------|-----------------------------------|--------------------------|-----------------------|-----------|
| HLB 1  | 350.321.003 | 10 / 1                            | 80                       | 150 x 150             | 0.6       |
| HLB 3  | 350.321.004 | 35 / 3.7                          | 130                      | 228 x 228             | 1.5       |
| HLB 5  | 350.321.006 | 50 / 5.1                          | 150                      | 270 x 270             | 2         |
| HLB 10 | 350.321.007 | 100 / 10.2                        | 215                      | 380 x 380             | 3.8       |
| HLB 12 | 350.321.008 | 120 / 12.2                        | 225                      | 408 x 408             | 5         |
| HLB 18 | 350.321.009 | 180 / 18.3                        | 240                      | 660 x 360             | 6.8       |
| HLB 20 | 350.321.010 | 200 / 20.3                        | 290                      | 508 x 508             | 6.7       |
| HLB 24 | 350.321.012 | 240 / 24.4                        | 215                      | 310 x 1000            | 9.5       |
| HLB 29 | 350.321.017 | 300 / 30.6                        | 348                      | 611 x 611             | 9.8       |
| HLB 32 | 350.321.013 | 320 / 32.6                        | 380                      | 658 x 658             | 13        |
| HLB 40 | 350.321.014 | 400 / 40.7                        | 405                      | 714 x 714             | 15.1      |
| HLB 67 | 350.321.015 | 670 / 68                          | 520                      | 908 x 908             | 23.5      |

- thickness incl. profile: HLB 1/3/5 is 22 mm; other models is 25 mm  
- reflecting labels: HLB 1/3/5 on 1 corner; other models on 3 corners



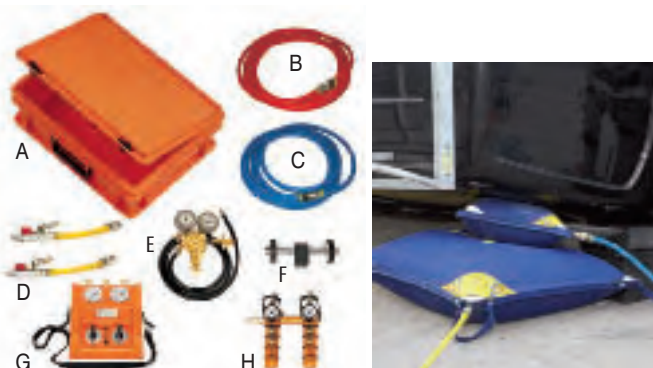
## ACCESSORIES

| item | model      | description                                                                                    | art. nr.    |
|------|------------|------------------------------------------------------------------------------------------------|-------------|
| 1    | AH 5 YU    | air hose, 5 m, yellow                                                                          | 350.572.006 |
|      | AH 5 BU    | air hose, 5 m, blue                                                                            | 350.572.007 |
|      | AH 5 RU    | air hose, 5 m, red                                                                             | 350.572.008 |
|      | AH 10 YU   | air hose, 10 m, yellow                                                                         | 350.572.009 |
|      | AH 10 BU   | air hose, 10 m, blue                                                                           | 350.572.011 |
|      | AH 10 RU   | air hose, 10 m, red                                                                            | 350.572.012 |
| 2    |            | shut-off hose with safety                                                                      | 350.582.035 |
| 3    | PRV 823 AU | pressure reducer for both 200 and 300 bar                                                      | 350.182.002 |
| 4    | DCV 10 U   | double control unit, safety valves set at 8.5 bar                                              | 350.582.034 |
| 5    | SCV 10 U   | single control unit, safety valve set at 8.5 bar                                               | 350.582.042 |
| 6    |            | connection piece for 2 air bottles 300 bar                                                     | 350.582.430 |
|      |            | connection piece for 2 air bottles 200 bar                                                     | 350.582.420 |
| 7    | HDC 10 AU  | synthetic control box, safety valves set at 8.5 bar                                            | 350.182.003 |
| 8    |            | air cylinder 6 litre, 300 bar                                                                  | 350.581.096 |
|      |            | air cylinder 6 litre, 200 bar                                                                  | 350.581.086 |
| 9    | UAS 10     | adapter set for connection on various air sources; delivered in synthetic carrying/storage box | 350.582.050 |



## AIR CONTROL SETS

|   | 300 BAR     |             | 200 BAR     |             |
|---|-------------|-------------|-------------|-------------|
|   | HCS 10 U    | DCS 10 U    | HCS 10 U    | DCS 10 U    |
|   | 350.582.038 | 350.582.039 | 350.582.435 | 350.582.436 |
| A | 1 x         | 1 x         | 1 x         | 1 x         |
| B | 1 x (5 m)   | 1 x (5 m)   | 1 x (5 m)   | 1 x (5 m)   |
| C | 1 x (5 m)   | 1 x (5 m)   | 1 x (5 m)   | 1 x (5 m)   |
| D | 2 x         | 2 x         | 2 x         | 2 x         |
| E | 1 x         | 1 x         | 1 x         | 1 x         |
| F | 1 x         | 1 x         | 1 x         | 1 x         |
| G | 1 x         | -           | 1 x         | -           |
| H | -           | 1 x         | -           | 1 x         |



## LIFTING BAGS - low pressure

| model     | art. nr.    | lifting capacity (a pair) kN/t | dimensions in storage bag (L x W) mm | weight (a pair) kg | height deflated mm | height inflated mm | max. working pressure bar | air contents (a pair) litre |
|-----------|-------------|--------------------------------|--------------------------------------|--------------------|--------------------|--------------------|---------------------------|-----------------------------|
| LAB 4 UN  | 350.512.204 | 39 / 4                         | 700 x 700                            | 9                  | 60                 | 620                | 0.5                       | 460                         |
| LAB 6 UN  | 350.512.206 | 59 / 6                         | 850 x 850                            | 19                 | 60                 | 620                | 0.5                       | 716                         |
| LAB 9 UN  | 350.512.209 | 88 / 9                         | 1050 x 1050                          | 28                 | 60                 | 620                | 0.5                       | 1028                        |
| LAB 16 UN | 350.512.216 | 157 / 16                       | 1320 x 1320                          | 70                 | 60                 | 620                | 0.5                       | 1846                        |



### Each set consists of:

- 1 x storage bag
- 2 x lifting bag (of equal capacity)
- 1 x pressure reducer
- 2 x low pressure hose
- 1 x double control unit
- 1 x repair kit



## FLOW STOPPERS

| SPECIFICATIONS             | OLS 100/200 | OLS 200/400 | OLS 300/600 | OLS 500/1000 |
|----------------------------|-------------|-------------|-------------|--------------|
| article number             | 360.311.002 | 360.311.004 | 360.311.006 | 360.311.010  |
| max. working pressure bar  | 3           | 3           | 3           | 3            |
| min. bursting pressure bar | 9           | 9           | 9           | 9            |
| max. back pressure bar     | 1           | 1           | 1           | 1            |
| smallest diameter mm       | 96          | 195         | 298         | 455          |
| largest diameter mm        | 200         | 400         | 600         | 1000         |
| length mm                  | 500         | 500         | 700         | 1000         |
| weight kg                  | 2           | 4           | 9           | 20           |



## FLOW STOPPERS - ACCESSORIES

| description                       | model      | art. nr.    |
|-----------------------------------|------------|-------------|
| single control unit               | SCV 3 U    | 360.582.007 |
| pressure reducer 200/300 bar      | PRV 823 AU | 350.182.002 |
| green air hose with couplers 3 m  | AH 3 MGU   | 360.582.004 |
| green air hose with couplers 5 m  | AH 5 MGU   | 360.582.002 |
| green air hose with couplers 10 m | AH 10 MGU  | 360.582.003 |
| green air hose with couplers 15 m | AH 15 MGU  | 360.582.005 |



## LEAK SEALING SYSTEM

| model                               | HVSP 250 U  |
|-------------------------------------|-------------|
| article number                      | 360.302.011 |
| max. working pressure bar           | 8           |
| dim. sealing pad (L x W) mm         | 600 x 390   |
| dim. sealing compartment (L x W) mm | 250 x 50    |
| weight ready for use kg             | 5.3         |

vacuum leak sealing system consists of:

- vacuum sealing plate
- stainless steel pressure gauge with protection cap
- vacuum pump with air hose, length 3 m
- drain cock with drain hose, length 3 m
- tube gel for optimal sealing (art. nr. 360.581.130)
- steel carrying case (L x W x H) 620 x 430 x 200 mm

delivered completely mounted and ready for use



## TANK SEALING SET

| model                         | HLS 2       |
|-------------------------------|-------------|
| article number                | 350.582.020 |
| working pressure bar          | 1.5         |
| cap. lifting bag at 1.5 bar t | 2           |

lifting bag HLB 10 to be ordered separately - see page 21

tank sealing set consists of:

- 1 x harness
- 1 x sealing plate (465 x 465 mm)
- 1 x protective cover orange (for item 8)
- 1 x protective cover green (for item 9)
- 4 x corner belt with buckle (length 635 mm)
- 2 x carrying belt with buckle (length 455 mm)
- 1 x shut-off hose, safety valve set at 1.5 bar
- 1 x stretch belt with ratchet, orange, length 10 m
- 1 x stretch belt with ratchet, green, length 10 m





## Vehicle Extrication Techniques (VET)

Available in numerous languages

Holmatro's "Vehicle Extrication Techniques" is a compact yet comprehensive guide for rescuers about the use of rescue tools and the extrication of victims from vehicles after road traffic collisions. "Vehicle extrication techniques" deals extensively with the basic techniques of extrication rescue. All basic techniques are explained step by step with the help of photos, illustrations, animations (CD) and videos (CD). In addition related subjects are discussed such as safety, vehicle design and construction, rescue tools and the approach to the rescue scene. Based on the latest developments in vehicle technology "Vehicle Extrication Techniques" is very suitable for training purposes or for use as a reference book. "Vehicle Extrication Techniques" is available in numerous languages as a book, a series of posters and as an interactive CD-ROM.

- 📖 **Book** - 100 pages, compact A 5 format, full colour
- 📄 **Poster** - 100 x 70 cm, full colour, set of 8 different posters, describing:
  - stabilization techniques
  - dashboard lift / roll
  - door removal
  - inverted roof flap
  - side removal
  - heavy goods vehicles / third door conversion
  - roof removal
  - extrication approach and equipment
- 💿 **CD-ROM** - interactive with many animations and videos



Book

Set of 8 different posters

CD-ROM

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