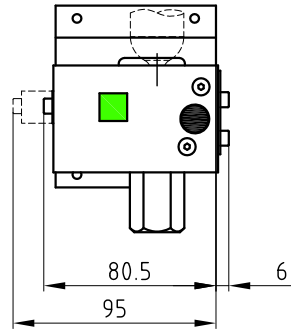
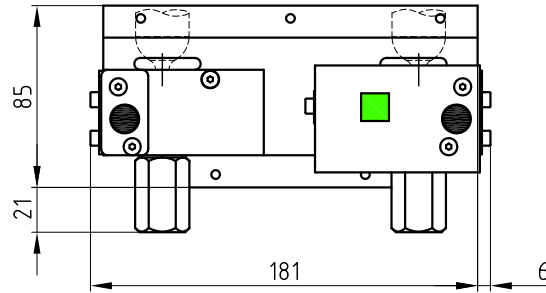


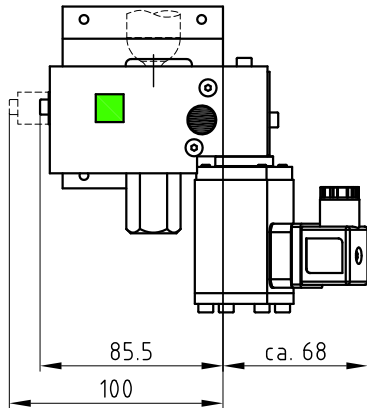
**RTC x.y-HA:**



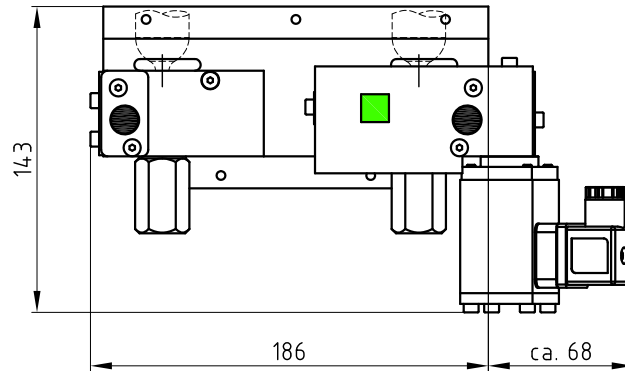
**RTC x.y-HA-HZ:**



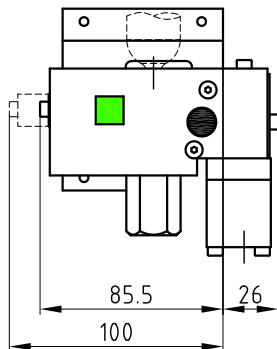
**RTC x.y-HEA:**



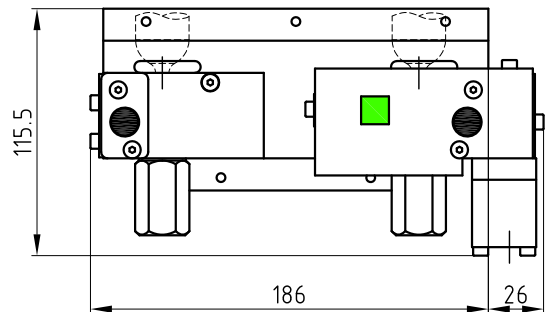
**RTC x.y-HEA-HZ:**



**RTC x.y-HPA:**

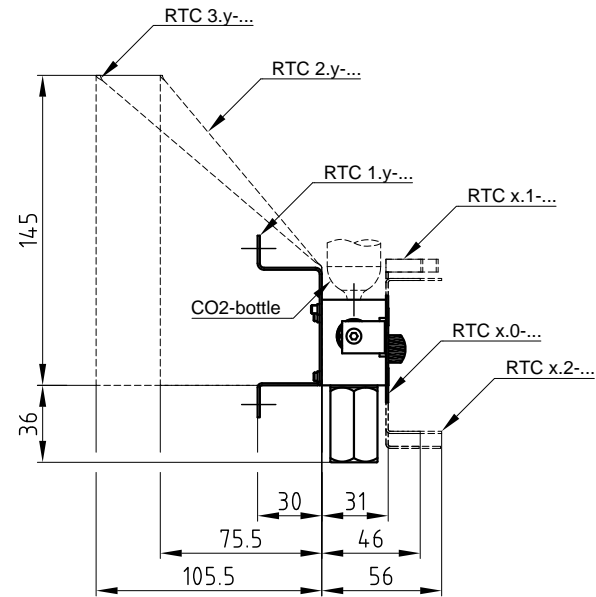


**RTC x.y-HPA-HZ:**



**RTC x.y-...:**

x ... version mounting angle  
y ... version front plate/glass sheet  
(variants see ordering designation)



**Description of function:**

The release valve RTC is a valve which taps a CO2 bottle by pushing the release button, or control of the electromagnet, or the pneumatic release, and so the CO2 can flow to the outlet CA (G1/8").

**Releasing:**

- 1) Manual releasing: Deeply press black button.
- 2) Electric releasing via the electromagnet. (only at HEA and HEA-HZ).
- 3) Pneumatic releasing: Applying the minimum release pressure on PA. (only at HPA and HPA-HZ).

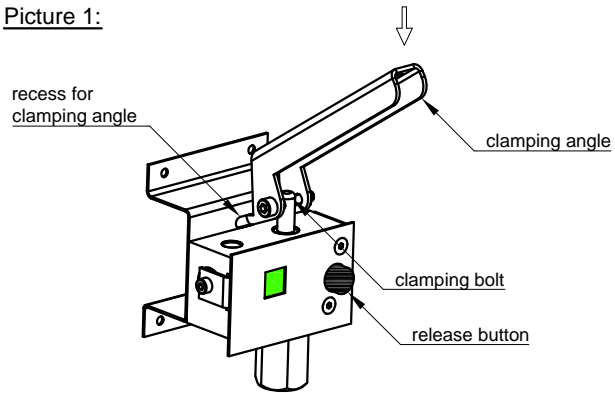
**Technical data:**

max. operating pressure	80bar
min. control pressure by PA	6bar
nominal width of valve	4mm
nominal width of piercing needle	2mm
rated voltage electromagnet	24VDC
rated current electromagnet	0,29ADC
duty cycle electromagnet	100%
ambient temperature range	-5°C - +55°C
VdS approval no. (no approval for HPA and HPA-HZ)	G507003

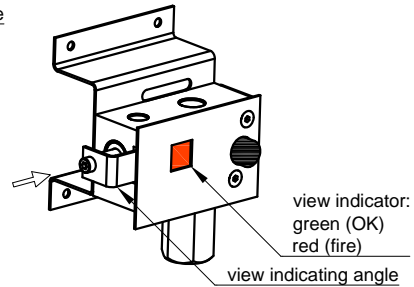
Tolerance Scale 1:2.5 Material

Created <b>Simetzberger</b>	Sheet <b>1/4</b>	Format <b>A3</b>	Title <b>Manual release RTC</b>	Document Style <b>Data sheet</b>
Approved <b>HA</b>	Issue Date <b>18.06.2015</b>			Document State <b>Valid</b>
<b>Grasl</b> Pneumatic Mechanik GmbH		QM FO 05.24.0		Document Number <b>04.011.DAT.35.02-E</b>

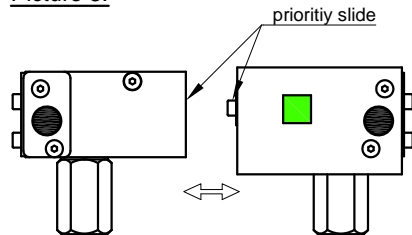
Picture 1:



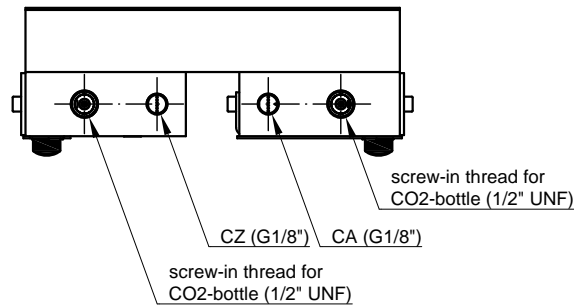
Picture 2:



Picture 3:

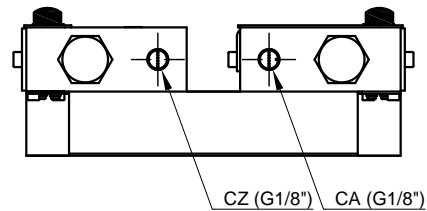


Standard connections:

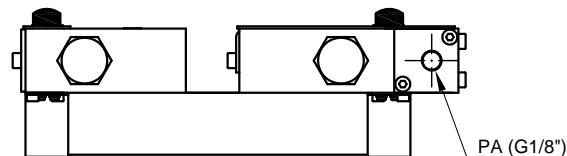


Option S1:

additional connections at the underside of valve



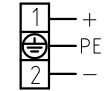
Connection HPA/HPA-HZ:



Connections:

- CA ... cylinder OPEN
- CZ ... cylinder CLOSE
- PA ... pneumatic remote control

Connecting diagramm electromagnet:



Commissioning the OPEN-release:

- 1) Hook clamping angle into the recess provided (see picture 1).
- 2) Place clamping bolt onto the piercing bolt in the valve.
- 3) Press clamping angle down fully until the piercing bolt engages.
- 4) Check if the piercing needle is located behind the piercing surface of the bottle screw-in thread!
- 5) Lightly grease O-Ring in the bottle screw-in thread.
- 6) Check position of the view indicator. View indicator must be on green, if not, press view indicator angle to the valve until view indicator is green (see picture 2)!
- 7) Screw in new CO2 bottle.
- 8) Following releasing, remove empty CO2 bottle (Caution: Residual pressure may be present) and repeat the process.

Commissioning the close-release:

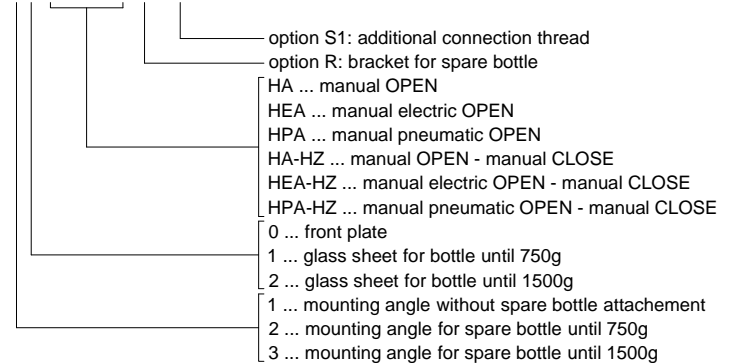
- 1) Carry out Points 1-5 of the commissioning of the OPEN release accordingly.
- 2) Check position of the priority slide. Both slides must be in the basic position! (see picture 3)
- 3) Screw in new CO2 bottle and close box.
- 4) Following a releasing, remove empty CO2 bottle. (Caution: Residual pressure may be present) and repeat operation.

Installation:

- When using CO2 one-way bottles, mount the valve as per drawing (bottle screwed in from the top)
- We recommend using CO2 bottles according to Drawing No.: 03.023.01.x and point out that the VdS recognition is only valid with these bottles.
- CAUTION: No dismantling of the valve from the mounting bracket.

Ordering desigantion:

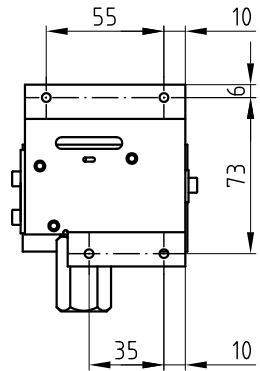
RTC x.y - aaa - bb - R - S1



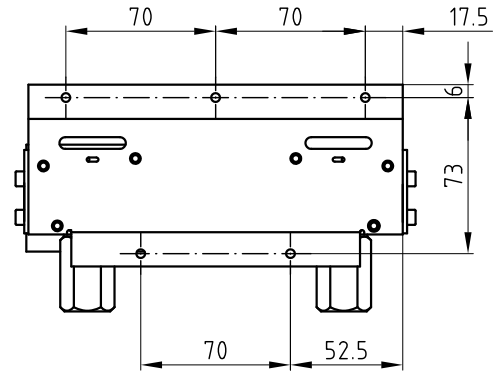
Tolerance Scale 1:2.5 Material

Created <b>Simetzberger</b>	Sheet <b>2/4</b>	Format <b>A3</b>	Title <b>Manual release RTC</b>	Document Style <b>Data sheet</b>
Approved <b>HA</b>	Issue Date <b>18.06.2015</b>			Document State <b>Valid</b>
Grasl Pneumatic Mechanik GmbH				Document Number <b>04.011.DAT.35.02-E</b>

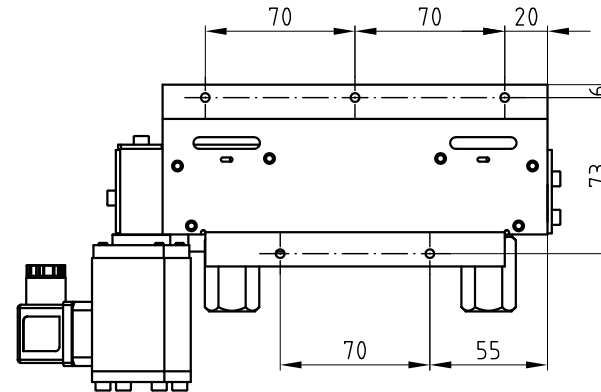
RTC 1.y-HA/HEA/HPA:



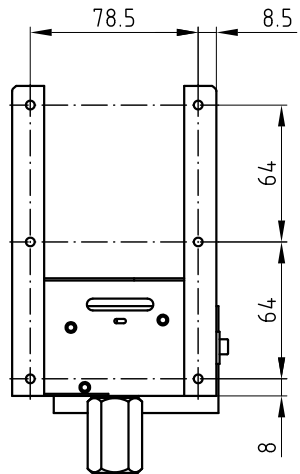
RTC 1.y-HA-HZ:



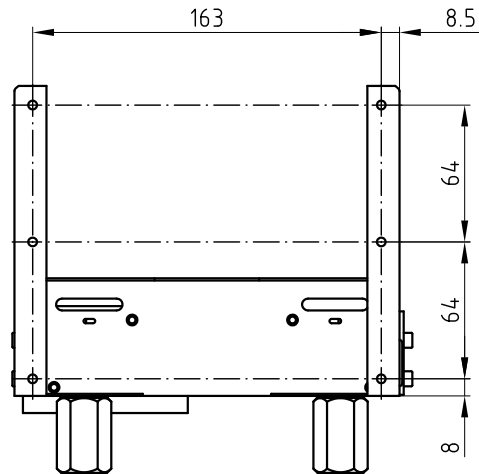
RTC 1.y-HEA/HPA-HZ:



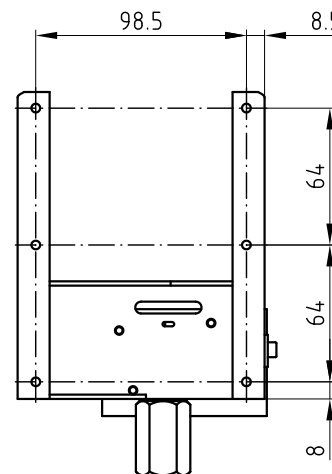
RTC 2.y-HA/HEA/HPA:



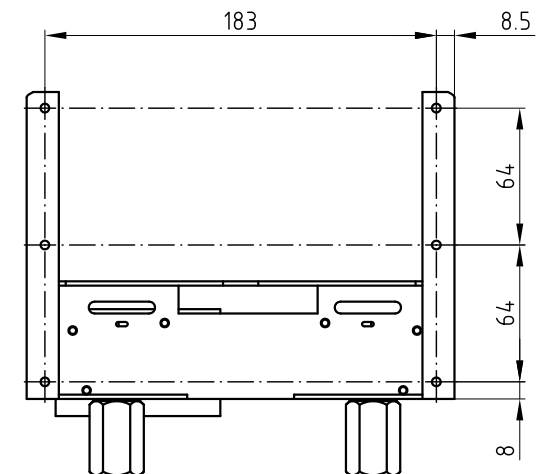
RTC 2.y-HA/HEA/HPA-HZ:



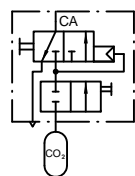
RTC 3.y-HA/HEA/HPA:



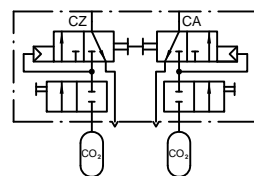
RTC 3.y-HA/HEA/HPA-HZ:



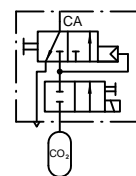
Circuit diagramm HA:



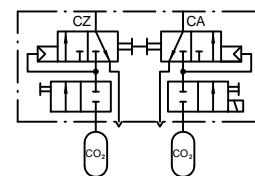
Circuit diagramm HA-HZ:



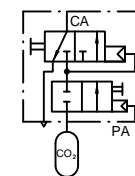
Circuit diagramm HEA:



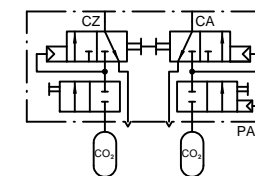
Circuit diagramm HEA-HZ:



Circuit diagramm HPA:



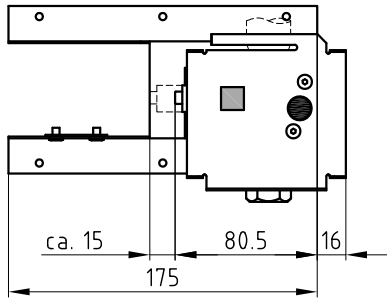
Circuit diagramm HPA-HZ:



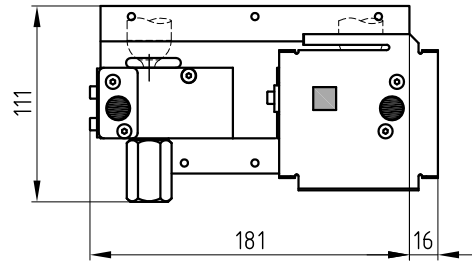
Tolerance Scale 1:2.5 Material

Created Simetzberger	Sheet 3/4	Format A3	Title Manual release RTC	Document Style Data sheet
Approved HA	Issue Date 18.06.2015			Document State Valid
Grasl Pneumatic Mechanik GmbH				Document Number 04.011.DAT.35.02-E

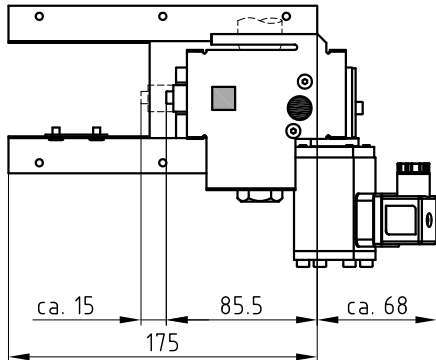
**RTC x.y-HA:**



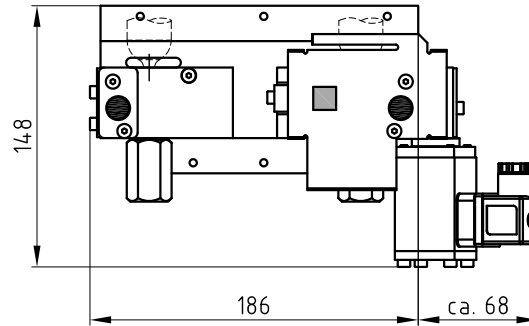
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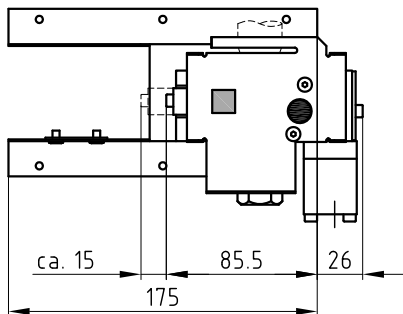
**RTC x.y-HEA:**



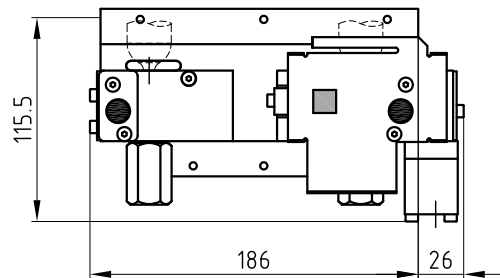
**RTC x.y-HEA-HZ:**



**RTC x.y-HPA:**

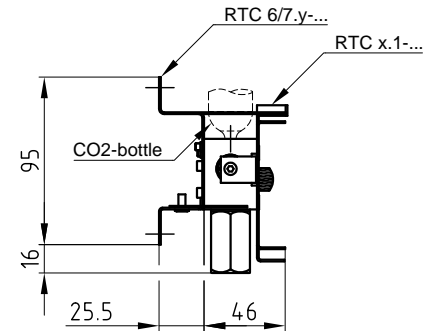


**RTC x.y-HPA-HZ:**



**RTC x.y-...:**

x ... version mounting angle  
y ... version front plate/glass sheet  
(variants see ordering designation)



**Description of function:**

The release valve RTC is a valve which taps a CO2 bottle by pushing the release button, or control of the electromagnet, or the pneumatic release, and so the CO2 can flow to the outlet CA (G1/8").

**Releasing:**

- 1) Manual releasing: Deeply press black button.
- 2) Electric releasing via the electromagnet (only at HEA and HEA-HZ).
- 3) Pneumatic releasing: Applying the minimum release pressure on PA (only at HPA and HPA-HZ).

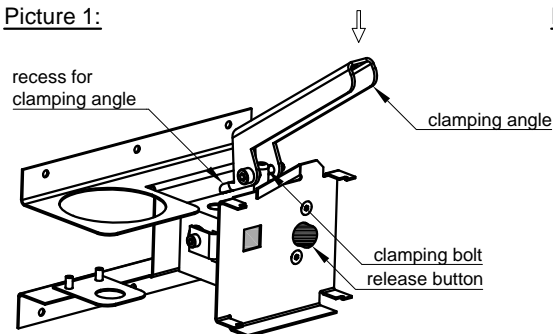
**Technical data:**

max. operating pressure	80bar
min. control pressure by PA	6bar
nominal width of valve	4mm
nominal width of piercing needle	2mm
rated voltage electromagnet	24VDC
rated current electromagnet	0,29ADC
duty cycle electromagnet	100%
ambient temperature range	-5°C - +55°C
VdS approval no. (no approval for HPA and HPA-HZ)	G507003

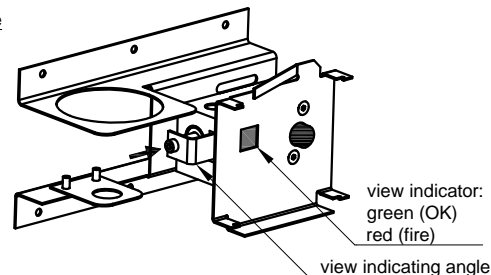
Tolerance Scale 1:3 Material

Created <b>Simetzberger</b>	Sheet <b>1/4</b>	Format <b>A3</b>	Title <b>Manual release RTC 6.1, RTC 7.1</b>	Document Style <b>Data sheet</b>
Approved <b>HA</b>	Issue Date <b>29.08.2017</b>			Document State <b>Valid</b>
Grasl Pneumatic Mechanik GmbH <small>QM FO 05.24.0</small>				Document Number <b>04.011.DAT.38.00-E</b>

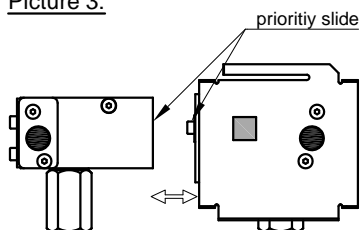
Picture 1:



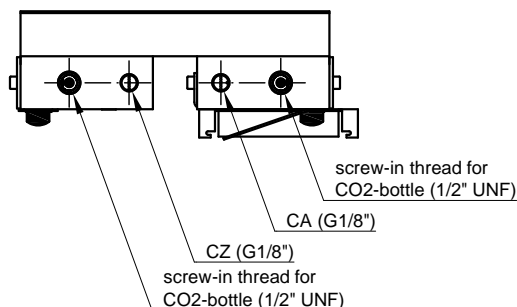
Picture 2:



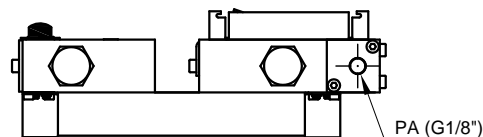
Picture 3:



Standard connections:



Connection HPA/HPA-HZ:



Connections:

- CA ... cylinder OPEN
- CZ ... cylinder CLOSE
- PA ... pneumatic remote control

Connecting diagramm electromagnet:



Commissioning the OPEN-release:

- 1) Hook clamping angle into the recess provided (see picture 1).
- 2) Place clamping bolt onto the piercing bolt in the valve.
- 3) Press clamping angle down fully until the piercing bolt engages.
- 4) Check if the piercing needle is located behind the piercing surface of the bottle screw-in thread!
- 5) Lightly grease O-Ring in the bottle screw-in thread.
- 6) Check position of the view indicator. View indicator must be on green, if not, press view indicator angle to the valve until view indicator is green (see picture 2)!
- 7) Screw in new CO2 bottle.
- 8) Following releasing, remove empty CO2 bottle (Caution: Residual pressure may be present) and repeat the process.

Commissioning the close-release:

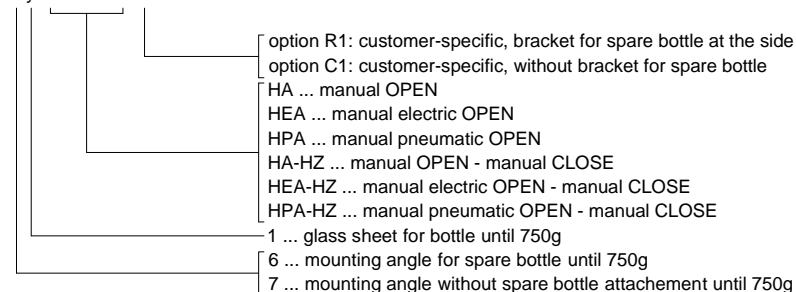
- 1) Carry out Points 1-5 of the commissioning of the OPEN release accordingly.
- 2) Check position of the priority slide. Both slides must be in the basic position! (see picture 3)
- 3) Screw in new CO2 bottle and close box.
- 4) Following a releasing, remove empty CO2 bottle. (Caution: Residual pressure may be present) and repeat operation.

Installation:

- When using CO2 one-way bottles, mount the valve as per drawing (bottle screwed in from the top)
- We recommend using CO2 bottles according to Drawing No.: 03.023.01.x and point out that the VdS recognition is only valid with these bottles.

Ordering desigantion:

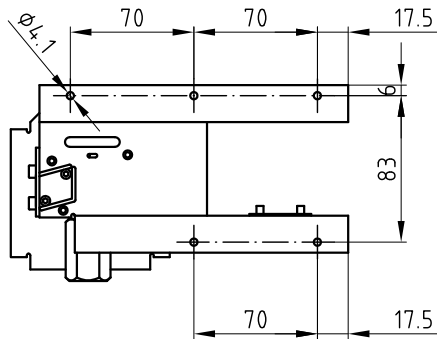
RTC x.y - aaa - bb - z1



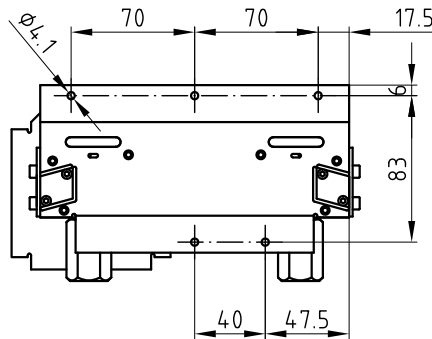
Tolerance Scale 1:3 Material

Created Simetzberger	Sheet 2/4	Format A3	Title Manual release RTC 6.1, RTC 7.1	Document Style Data sheet
Approved HA	Issue Date 29.08.2017			Document State Valid
Grasl Pneumatic Mechanik Gmbh	QM FO 05.24.0			Document Number 04.011.DAT.38.00-E

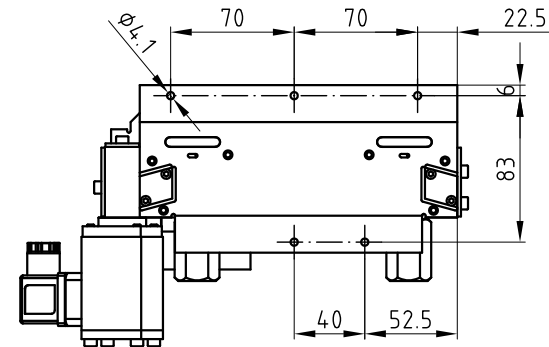
RTC 6.y-HA/HEA/HPA:



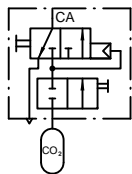
RTC 7.y-HA-HZ:



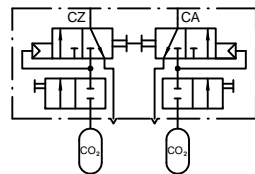
RTC 7.y-HEA/HPA-HZ:



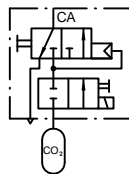
Circuit diagramm HA:



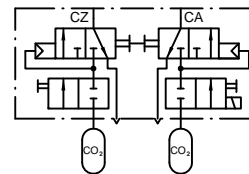
Circuit diagramm HA-HZ:



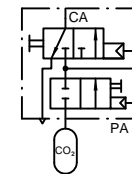
Circuit diagramm HEA:



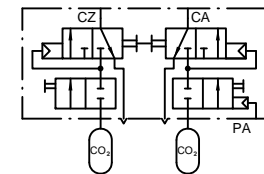
Circuit diagramm HEA-HZ:



Circuit diagramm HPA:



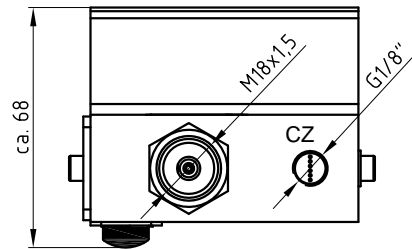
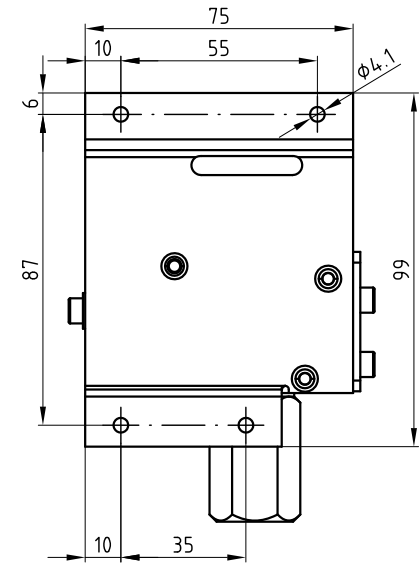
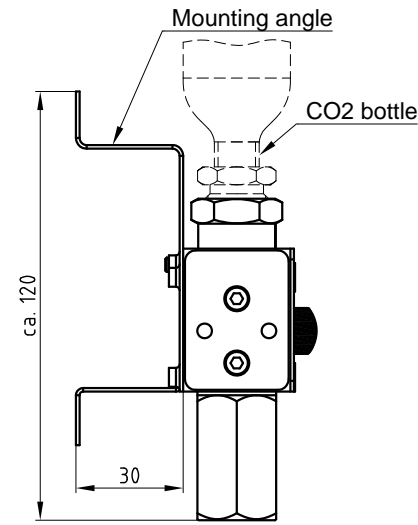
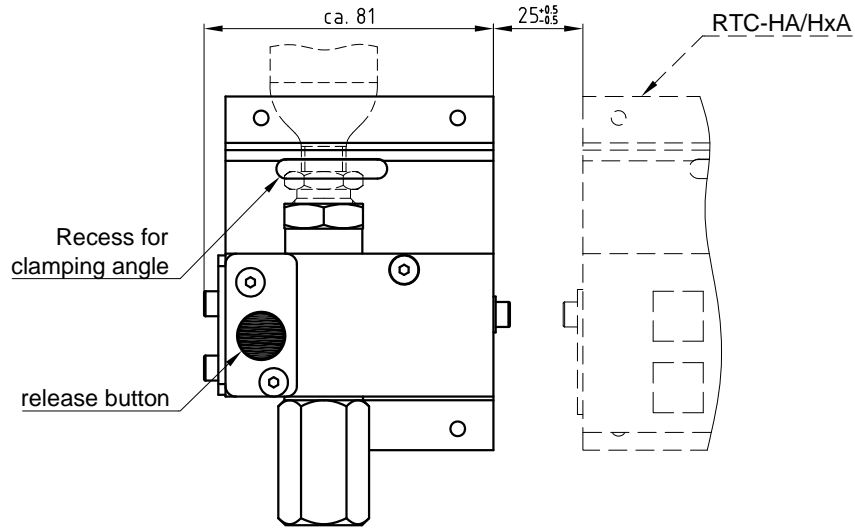
Circuit diagramm HPA-HZ:



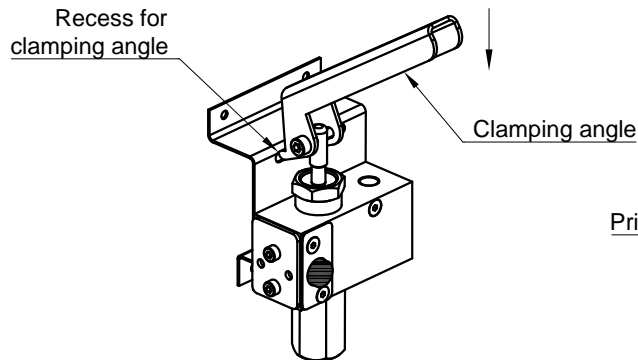
Tolerance Scale 1:3 Material

Created Simetzberger	Sheet 3/4	Format A3	Title Manual release RTC 6.1, RTC 7.1	Document Style Data sheet
Approved HA	Issue Date 29.08.2017			Document State Valid
Grasl Pneumatic Mechanik GmbH				Document Number 04.011.DAT.38.00-E

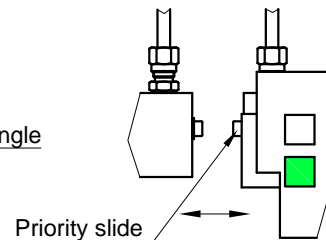
QM FO 05.24.0



Picture 1:



Picture 2:



Diese Zeichnung ist Eigentum der  
 Fa. Grasl GmbH A-3454 Reidling, EuropastraÙ 1  
 Die Weiterverwendung oder Vervielfältigung  
 ohne unser schriftliches Einverständnis ist  
 verboten!

**Releasing:**

Manual releasing: deeply press black button.

**Description of function:**

The release valve RTC is a valve which taps a CO2 bottle by pushing the release button and so the CO2 can flow to the outlet CZ (G1/8").

**Connections:**

CZ ... cylinder CLOSE

**Commissioning the CLOSE-release:**

- 1.) Before activating the CLOSE-release you have to activate the OPEN-release according it's commissioning instruction.
- 2.) Hook clamping angle into the recess provided (see picture 1).
- 3.) Place clamping bolt onto the piercing bolt in the valve.
- 4.) Press clamping angle down fully until the piercing bolt engages.
- 5.) Check if the piercing needle is located behind the piercing surface of the bottle screw-in thread!
- 6.) Lightly grease O-Ring in the bottle screw-in thread.

- 7.) Check position of the priority slide. Both slides must be in the basic position! (see picture 2)

- 8.) Screw in new CO2 bottle and close box.

- 9.) Following a releasing, remove empty CO2 bottle. (Caution: Residual pressure may be present) and repeat operation.

**Installation:**

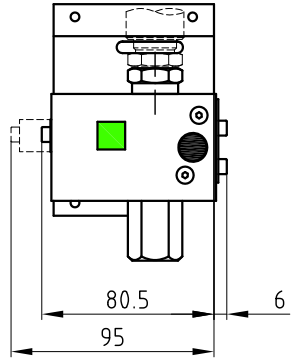
- When using CO2 one-way bottles, mount the valve as per drawing (bottle screwed in from the top)

**Technical Data:**

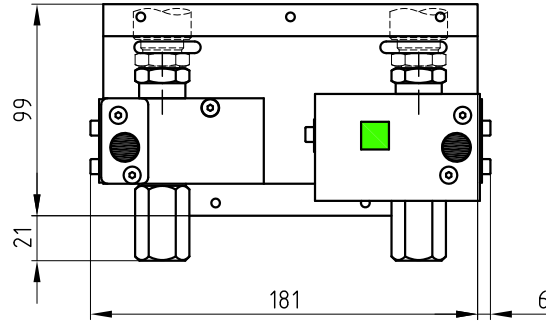
max. operating pressure	80bar
nominal width of valve	NW = 4mm
nominal width of piercing needle	NW = 2mm
ambient temperature range	-25°C - +75°C

GRASL Pneumatic-Mechanik GmbH A-3454 Reidling EuropastraÙ 1		FreimaÙtoleranz nach DIN 7168:	MaÙstab: 1:1		Werkstoff:
		ID - Nr.:			
		Bear.	18.12.2009	Name	Simefzberger
		Gepr.	18.12.2009		ER
		Norm			
		Type:		Bezeichnung:	
		RTC		Datenblatt Auslöseventil RTC-HZ-M18x1,5	
		Zeichnung Nr.:			Blatt
		04.011.DAT.34.00-E			BL.
Zus.	Änderung	Datum	Name	(Urspr.)	(Ers.f.)
					(Ers.d.)

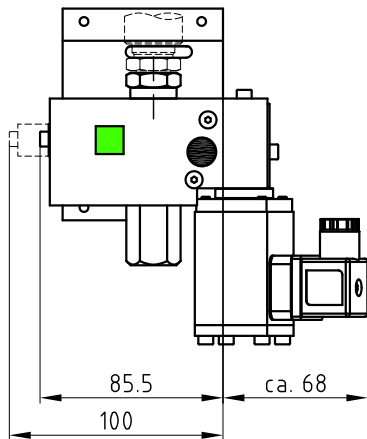
**RTC x.y-HA-M18x1,5:**



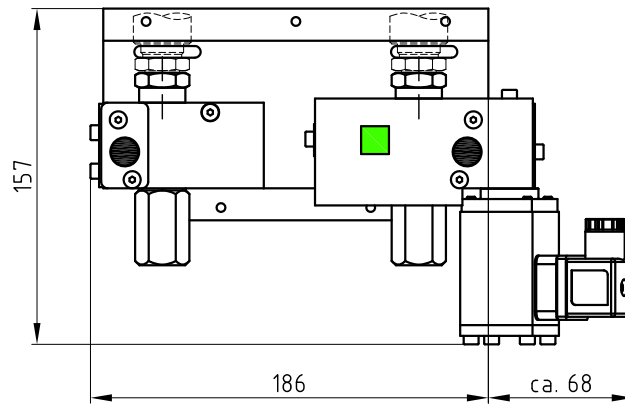
**RTC x.y-HA-HZ-M18x1,5:**



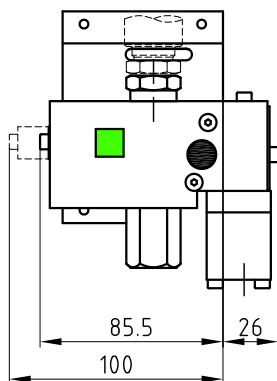
**RTC x.y-HEA-M18x1,5:**



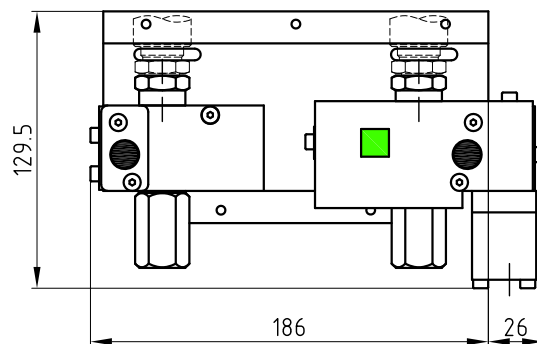
**RTC x.y-HEA-HZ-M18x1,5:**



**RTC x.y-HPA-M18x1,5:**

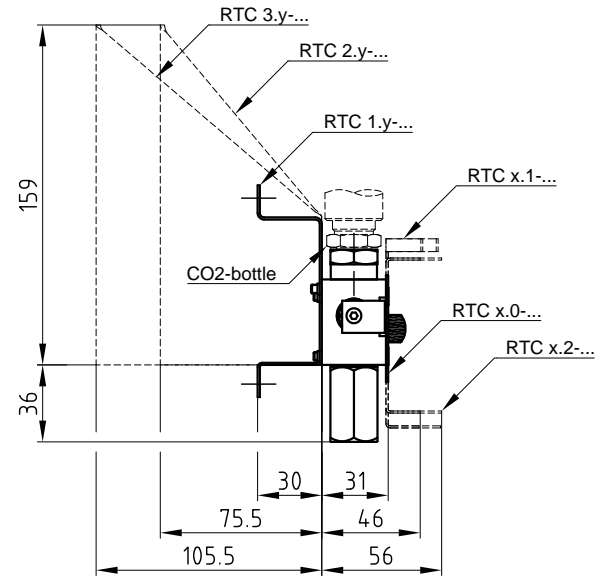


**RTC x.y-HPA-HZ-M18x1,5:**



**RTC x.y-...-M18x1,5:**

x ... version mounting angle  
y ... version front plate/glass sheet  
(variants see ordering designation)



**Description of function:**

The release valve RTC is a valve which taps a CO2 bottle by pushing the release button, or control of the electromagnet, or the pneumatic release, and so the CO2 can flow to the outlet CA (G1/8").

**Releasing:**

- 1) Manual releasing: Deeply press black button.
- 2) Electric releasing via the electromagnet. (only at HEA and HEA-HZ).
- 3) Pneumatic releasing: Applying the minimum release pressure on PA. (only at HPA and HPA-HZ).

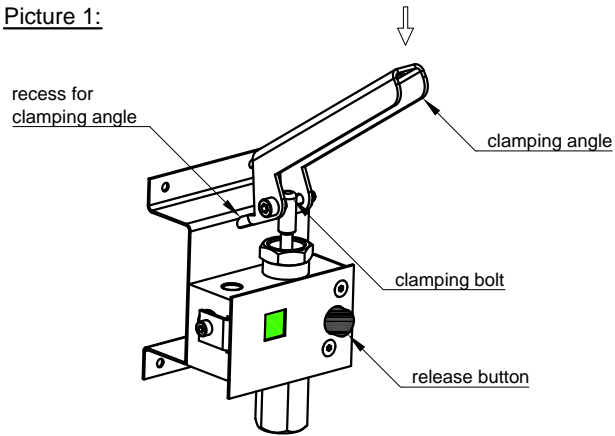
**Technical data:**

max. operating pressure	80bar
min. control pressure by PA	6bar
nominal width of valve	4mm
nominal width of piercing needle	2mm
rated voltage electromagnet	24VDC
rated current electromagnet	0,29ADC
duty cycle electromagnet	100%
ambient temperature range	-5°C - +55°C

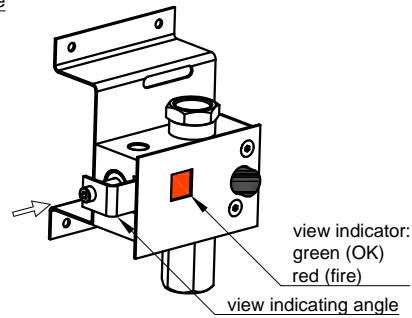
Tolerance Scale 1:2.5 Material

Created <b>Simetzberger</b>	Sheet <b>1/4</b>	Format <b>A3</b>	Title <b>Manual release RTC-M18x1,5</b>	Document Style <b>Data sheet</b>
Approved <b>HA</b>	Issue Date <b>18.06.2015</b>			Document State <b>Valid</b>
<b>Grasl</b>				Document Number <b>04.011.DAT.36.00-E</b>
Pneumatic Mechanik GmbH QM FO 05.24.0				

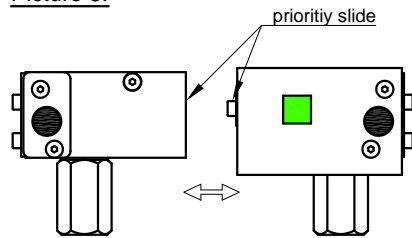
Picture 1:



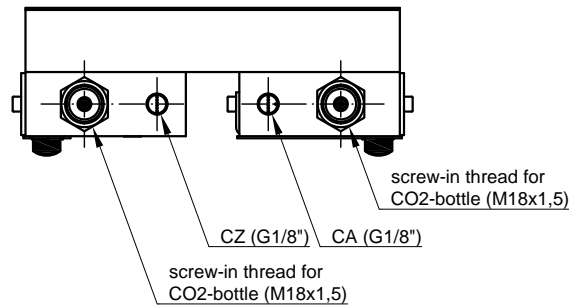
Picture 2:



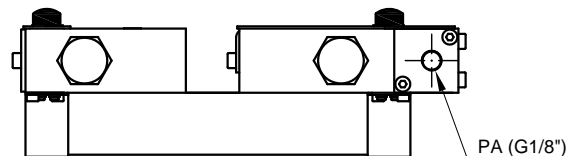
Picture 3:



Standard connections:

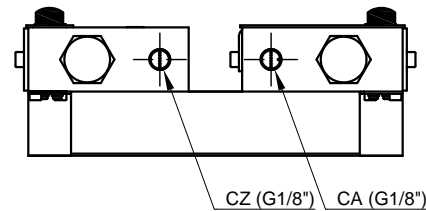


Connection HPA/HPA-HZ-M18x1,5:



Option S1:

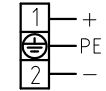
additional connections at the underside of valve



Connections:

- CA ... cylinder OPEN
- CZ ... cylinder CLOSE
- PA ... pneumatic remote control

Connecting diagramm electromagnet:



Commissioning the OPEN-release:

- 1) Hook clamping angle into the recess provided (see picture 1).
- 2) Place clamping bolt onto the piercing bolt in the valve.
- 3) Press clamping angle down fully until the piercing bolt engages.
- 4) Check if the piercing needle is located behind the piercing surface of the bottle screw-in thread!
- 5) Check position of the view indicator. View indicator must be on green, if not, press view indicator angle to the valve until view indicator is green (see picture 2)!
- 6) Screw in new CO2 bottle.
- 7) Following releasing, remove empty CO2 bottle (Caution: Residual pressure may be present) and repeat the process.

Commissioning the close-release:

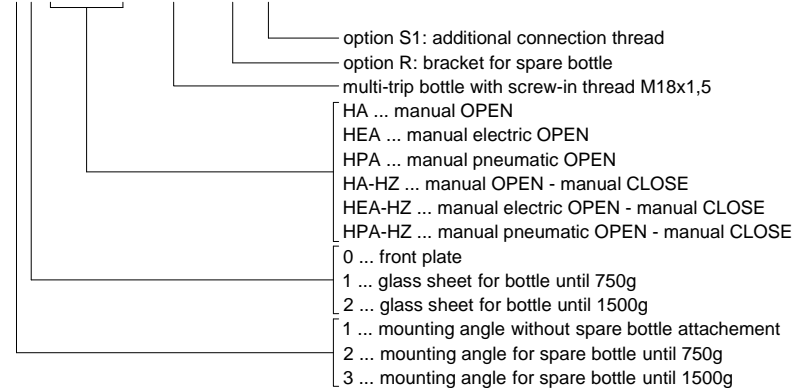
- 1) Carry out Points 1-4 of the commissioning of the OPEN release accordingly.
- 2) Check position of the priority slide. Both slides must be in the basic position! (see picture 3)
- 3) Screw in new CO2 bottle and close box.
- 4) Following a releasing, remove empty CO2 bottle. (Caution: Residual pressure may be present) and repeat operation.

Installation:

- When using CO2-multi-trip bottles (without ascending-tube) CO2 one-way bottles, mount the valve as per drawing (bottle screwed in from the top)
- CAUTION: No dismounting of the valve from the mounting bracket.

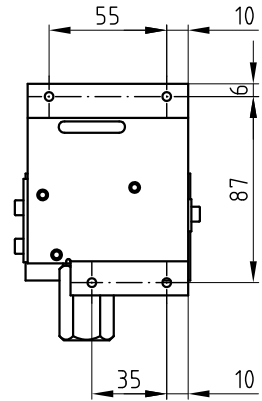
Ordering designation:

RTC x.y - aaa - bb - M18x1,5 - R - S1

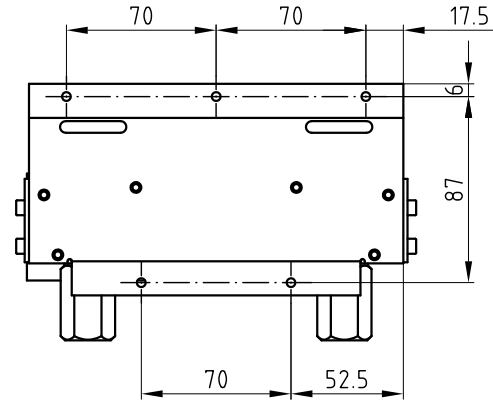


Tolerance		Scale 1:2.5		Material	
Created	Sheet	Format	Title	Document Style	
Simetzberger	2/4	A3	Manual release RTC-M18x1,5	Data sheet	
Approved	Issue Date			Document State	
HA	18.06.2015			Valid	
Grasl				Document Number	
Pneumatic Mechanik GmbH				04.011.DAT.36.00-E	

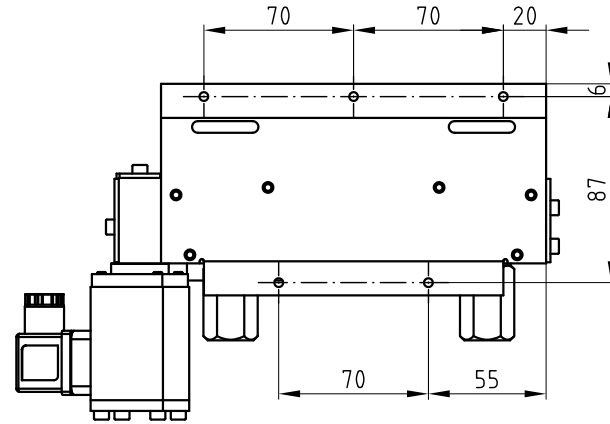
RTC 1.y-HA/HEA/HPA-M18x1,5:



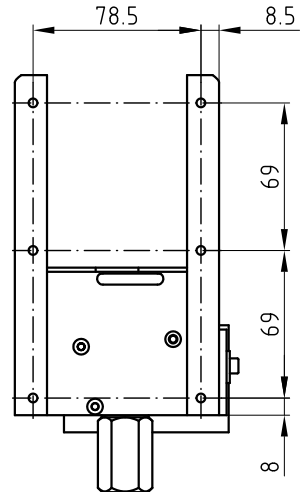
RTC 1.y-HA-HZ-M18x1,5:



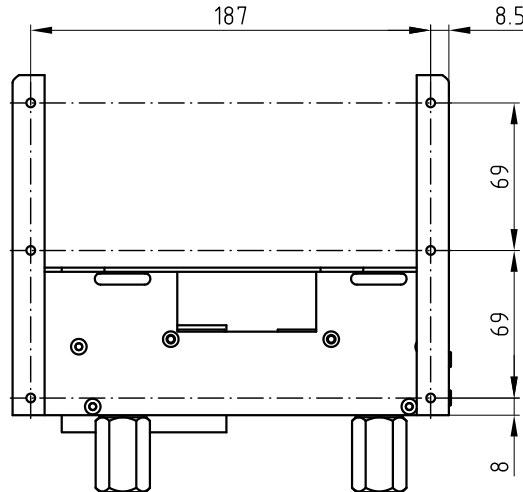
RTC 1.y-HEA/HPA-HZ-M18x1,5:



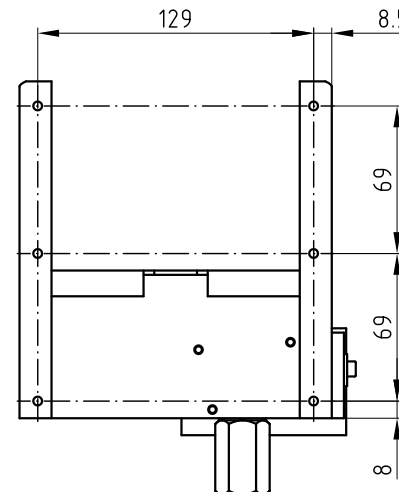
RTC 2.y-HA/HEA/HPA-M18x1,5:



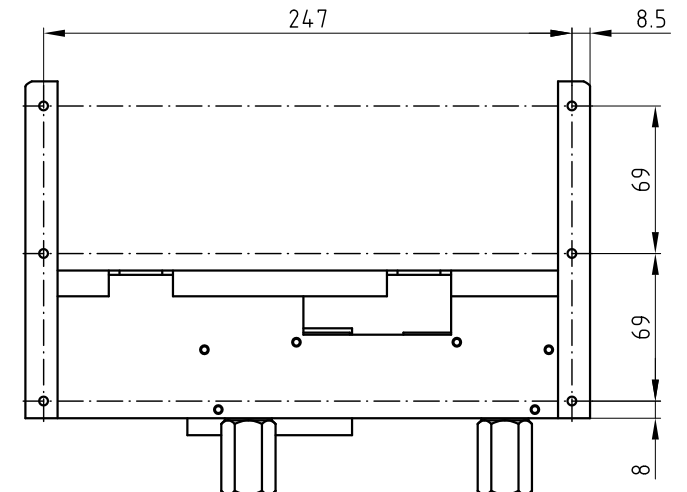
RTC 2.y-HA/HEA/HPA-HZ-M18x1,5:



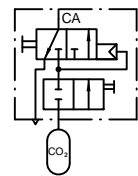
RTC 3.y-HA/HEA/HPA-M18x1,5:



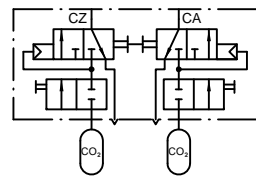
RTC 3.y-HA/HEA/HPA-HZ-M18x1,5:



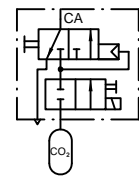
Circuit diagramm HA:



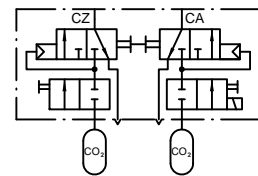
Circuit diagramm HA-HZ:



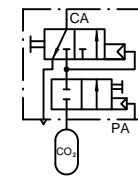
Circuit diagramm HEA:



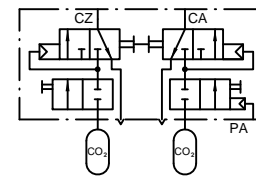
Circuit diagramm HEA-HZ:



Circuit diagramm HPA:

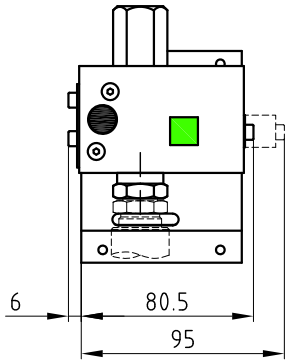


Circuit diagramm HPA-HZ:

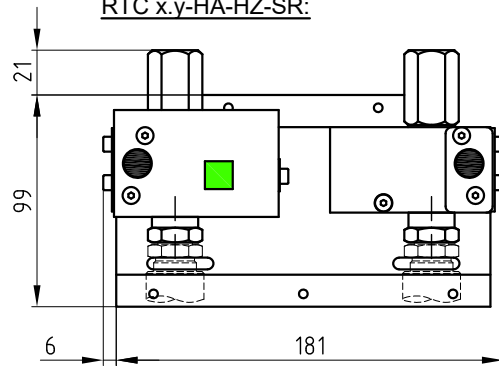


Tolerance	Scale	1:2.5	Material	
Created Simetzberger	Sheet 3/4	Format A3	Title Manual release RTC-M18x1,5	Document Style Data sheet
Approved HA	Issue Date 18.06.2015			Document State Valid
Grasl Pneumatic Mechanik GmbH	QM FO 05.24.0			Document Number 04.011.DAT.36.00-E

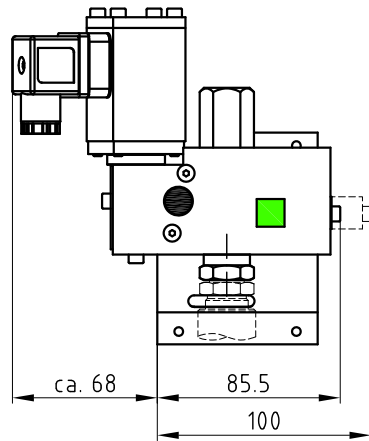
**RTC x.y-HA-SR:**



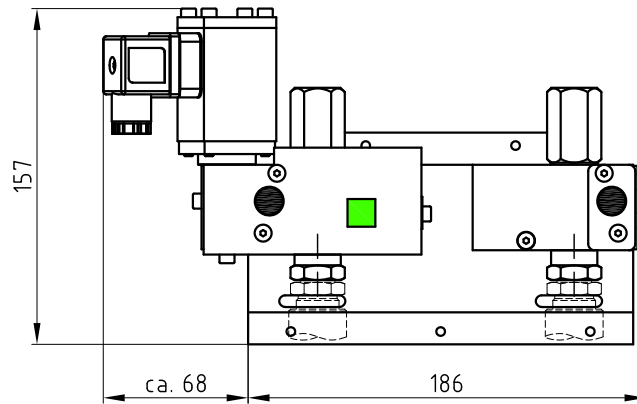
**RTC x.y-HA-HZ-SR:**



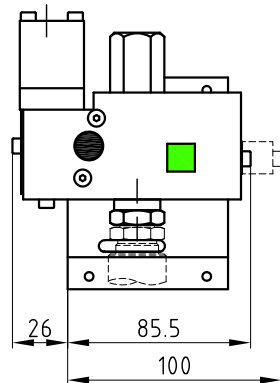
**RTC x.y-HEA-SR:**



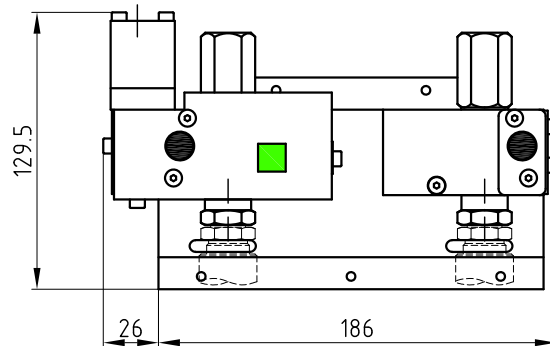
**RTC x.y-HEA-HZ-SR:**



**RTC x.y-HPA-SR:**

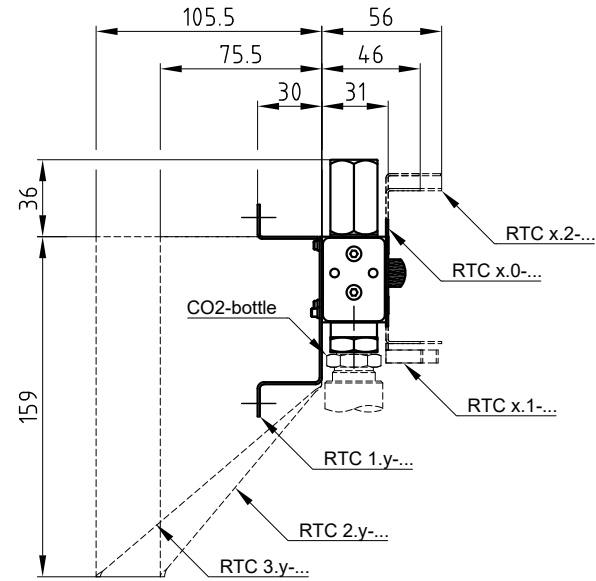


**RTC x.y-HPA-HZ-SR:**



**RTC x.y-...-SR:**

x ... version mounting angle  
y ... version front plate/glass sheet  
(variants see ordering designation)



**Description of function:**

The release valve RTC is a valve which taps a CO2 bottle by pushing the release button, or control of the electromagnet, or the pneumatic release, and so the CO2 can flow to the outlet CA (G1/8").

**Releasing:**

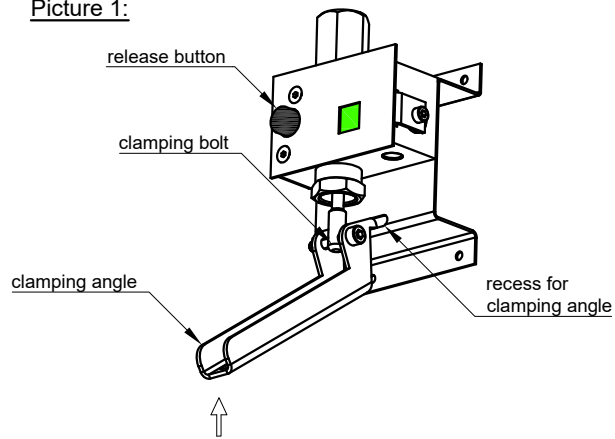
- 1) Manual releasing: Deeply press black button.
- 2) Electric releasing via the electromagnet. (only at HEA and HEA-HZ).
- 3) Pneumatic releasing: Applying the minimum release pressure on PA. (only at HPA and HPA-HZ).

**Technical data:**

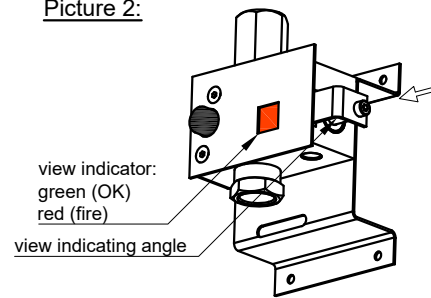
max. operating pressure	80bar
min. control pressure by PA	6bar
nominal width of valve	4mm
nominal width of piercing needle	2mm
rated voltage electromagnet	24VDC
rated current electromagnet	0,29ADC
duty cycle electromagnet	100%
ambient temperature range	-5°C - +55°C

Tolerance		Scale 1:2.5		Material	
Created Simetzberger	Sheet 1/4	Format A3	Title Manual release RTC-SR		
Approved HA	Issue Date 02.12.2019		Document Style Data sheet		Document State Valid
Grasl Pneumatic Mechanik GmbH			Document Number 04.011.DAT.37.01-E		QM FO 05.24.0

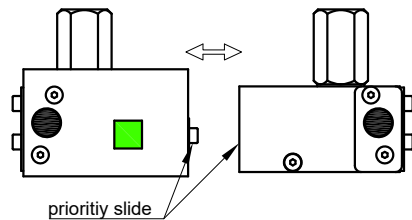
Picture 1:



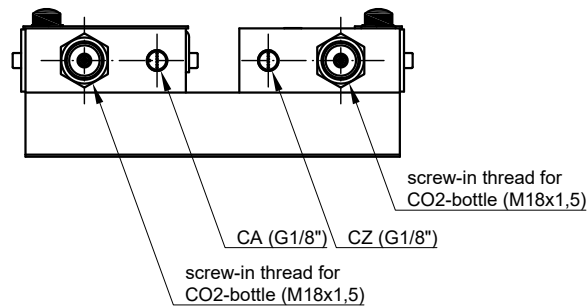
Picture 2:



Picture 3:

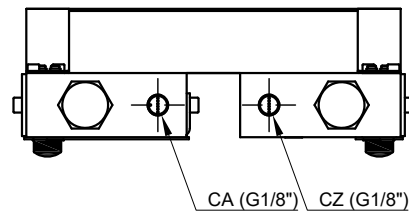


Standard connections:

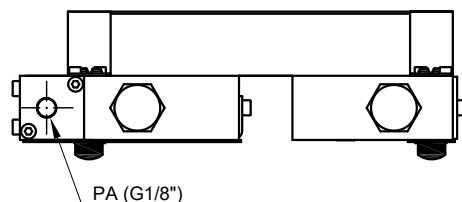


Option S1:

additional connections at the upperside of valve



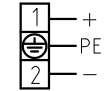
Connection HPA/HPA-HZ-SR:



Connections:

- CA ... cylinder OPEN
- CZ ... cylinder CLOSE
- PA ... pneumatic remote control

Connecting diagramm electromagnet:



Commissioning the OPEN-release:

- 1) Hook clamping angle into the recess provided (see picture 1).
- 2) Place clamping bolt onto the piercing bolt in the valve.
- 3) Press clamping angle up fully until the piercing bolt engages.
- 4) Check if the piercing needle is located behind the piercing surface of the bottle screw-in thread!
- 5) Check position of the view indicator. View indicator must be on green, if not, press view indicator angle to the valve until view indicator is green (see picture 2)!
- 6) Screw in new CO2 bottle.
- 7) Following releasing, remove empty CO2 bottle (Caution: Residual pressure may be present) and repeat the process.

Commissioning the close-release:

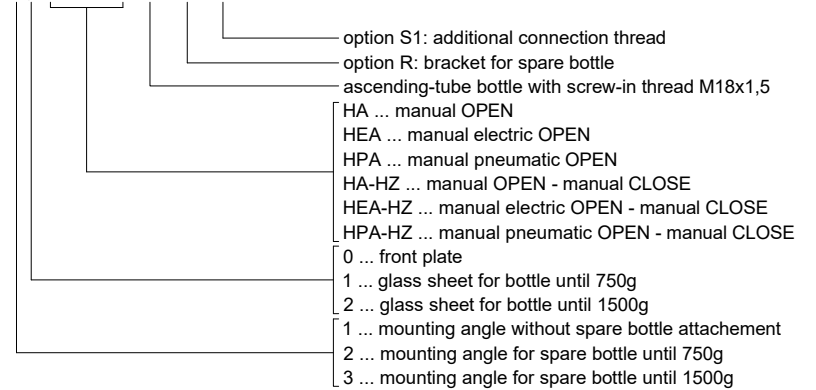
- 1) Carry out Points 1-4 of the commissioning of the OPEN release accordingly.
- 2) Check position of the priority slide. Both slides must be in the basic position! (see picture 3)
- 3) Screw in new CO2 bottle and close box.
- 4) Following a releasing, remove empty CO2 bottle. (Caution: Residual pressure may be present) and repeat operation.

Installation:

- When using CO2-multi-trip bottles (ascending-tube), mount the valve as per drawing (bottle screwed in from the bottom)
- CAUTION: No dismounting of the valve from the mounting bracket.

Ordering designation:

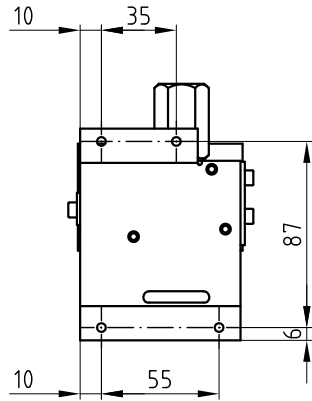
RTC x.y - aaa - bb - SR - R - S1



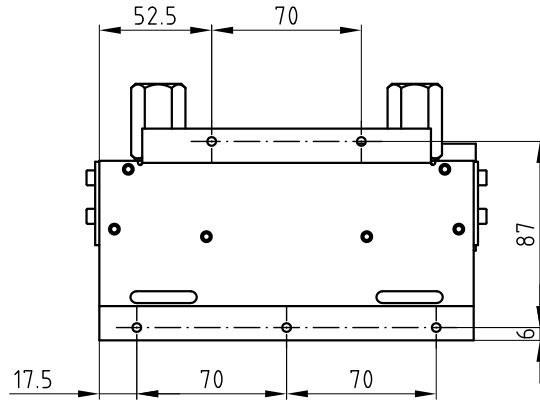
Tolerance Scale 1:2.5 Material

Created Simetzberger	Sheet 2/4	Format A3	Title Manual release RTC-SR	Document Style Data sheet
Approved HA	Issue Date 02.12.2019			Document State Valid
Grasl Pneumatic Mechanik GmbH	QM FO 05.24.0			Document Number 04.011.DAT.37.01-E

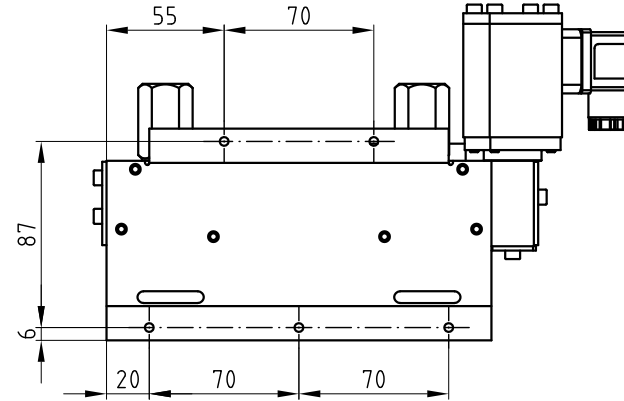
RTC 1.y-HA/HEA/HPA-SR:



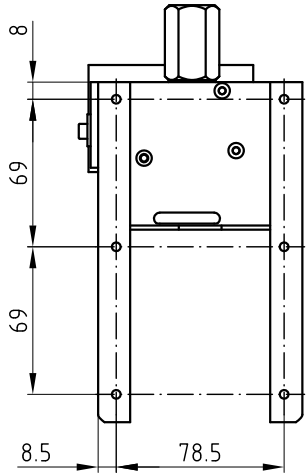
RTC 1.y-HA-HZ-SR:



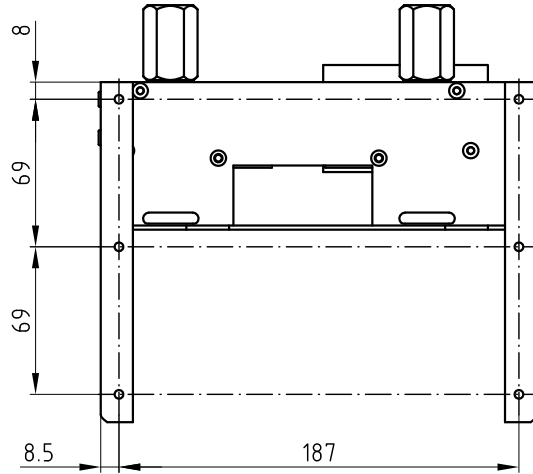
RTC 1.y-HEA/HPA-HZ-SR:



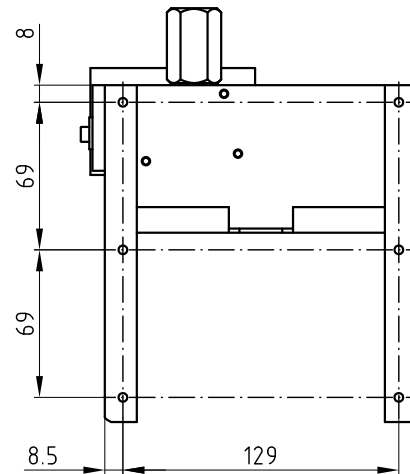
RTC 2.y-HA/HEA/HPA-SR:



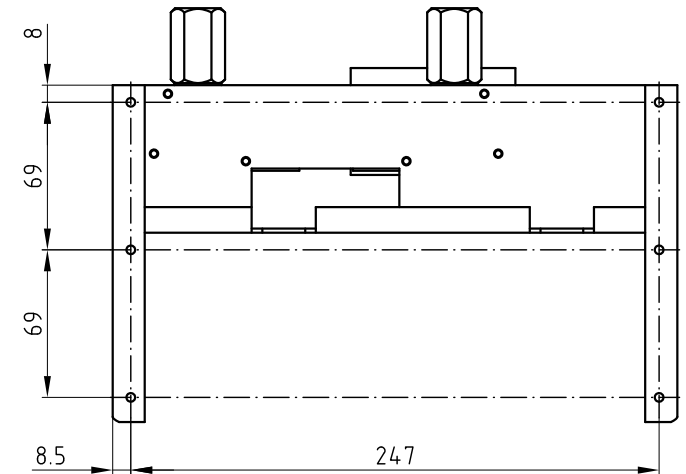
RTC 2.y-HA/HEA/HPA-HZ-SR:



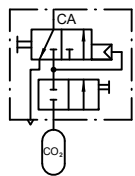
RTC 3.y-HA/HEA/HPA-SR:



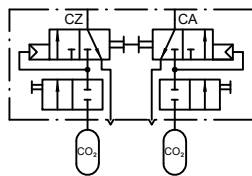
RTC 3.y-HA/HEA/HPA-HZ-SR:



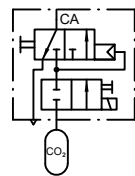
Circuit diagramm HA:



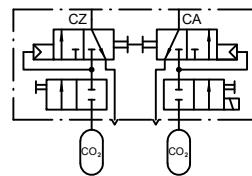
Circuit diagramm HA-HZ:



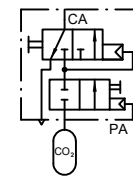
Circuit diagramm HEA:



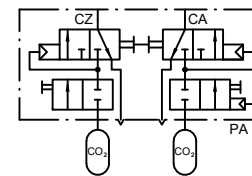
Circuit diagramm HEA-HZ:



Circuit diagramm HPA:



Circuit diagramm HPA-HZ:



Tolerance Scale 1:2.5 Material

Created Simetzberger	Sheet 3/4	Format A3	Title Manual release RTC-SR	Document Style Data sheet
Approved HA	Issue Date 02.12.2019			Document State Valid
Grasl Pneumatic Mechanik GmbH				Document Number 04.011.DAT.37.01-E