

COMPRESSED AIR
PUSHING YOU FORWARD

COMPRESSED AIR TREATMENT



FILTERS, DRYERS, OIL-WATER SEPARATORS & CONDENSATE
MANAGEMENT SYSTEMS – FLOW RATE UP TO 33 M³/MIN AT A
MAXIMUM OF 16 BAR





↑ RENNER GmbH in Güglingen in the beautiful Zabergäu region

RENNER – THE COMPANY



RENNER GmbH Kompressoren, based in Güglingen, is a medium-sized family-run business with a dynamic track record spanning over 30 years.

Our aim is to develop and manufacture efficient and reliable compressors bearing the **'Made in Germany'** quality mark.

The company employs around 250 people in the areas of development, testing, production, quality assurance, procurement, product management, marketing, sales and service.

 **MADE IN GERMANY**

TRADITION

Respect for our customers are key to the long-term success of our partnership.

CHALLENGING

Quality you can rely on!
Reliable, efficient and durable.

CUSTOMER-FOCUSED

We employ skilled, experienced staff, supported by a network of trained local specialist partners.

RESPONSIBLE

Our commitment to environmental sustainability is an integral part of our philosophy.

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COMPRESSED AIR QUALITY IN ACCORDANCE WITH ISO 8573-1:2010

The ISO 8573-1 standard specifies quality classes for compressed air. It assesses purity on the basis of three criteria: particles, water (condensate) and oil. Quality is expressed as a combination of numbers, such as 1:4:2 – the lower the number, the higher the purity in that category. This makes it possible to clearly define and ensure the appropriate compressed air quality for different applications.

ISO 8573-1:2010 [1:4:2]



1	CYCLONE SEPARATOR RF-C			
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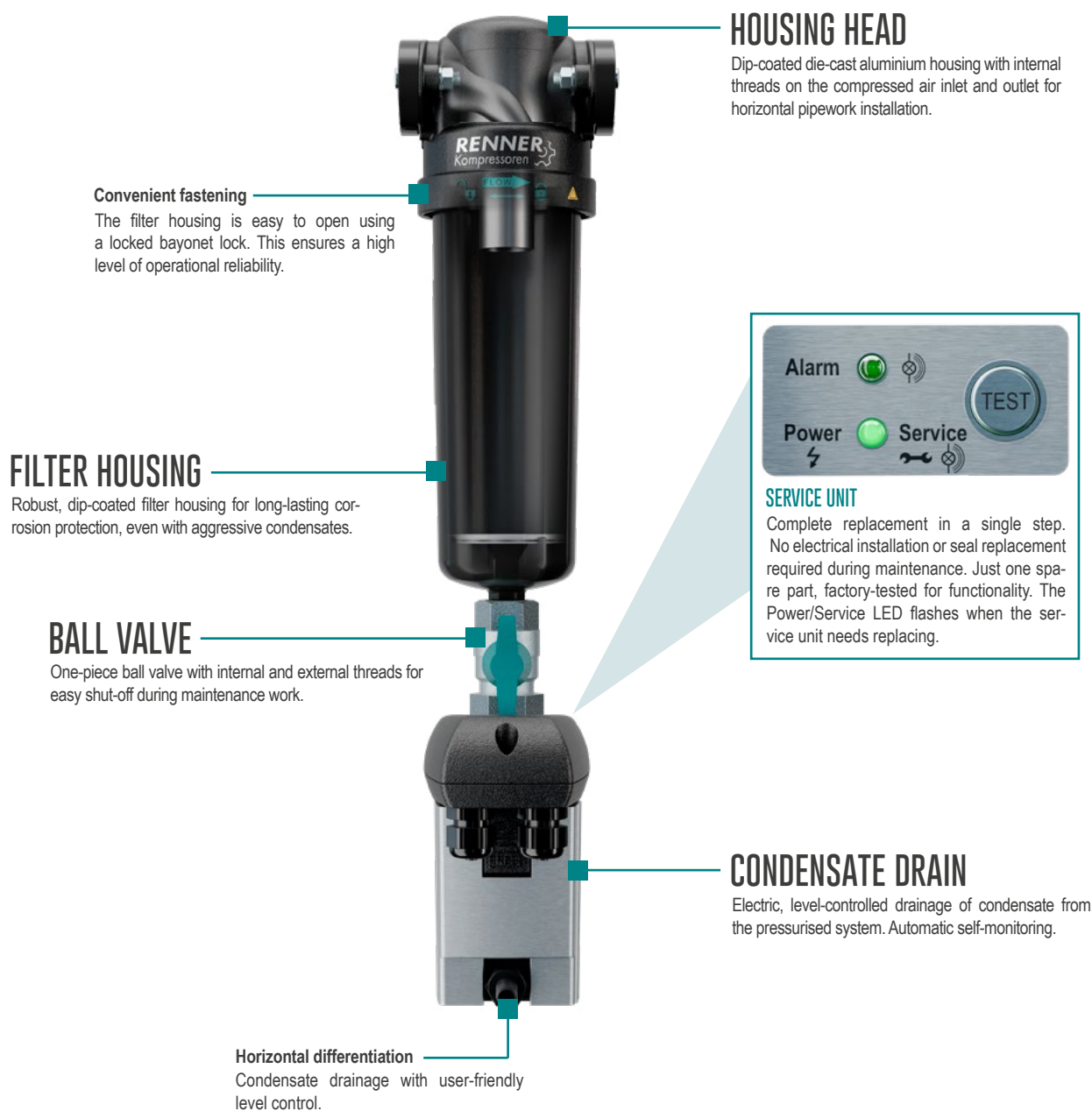


CYCLONE SEPARATOR

RF-C INCLUDING LEVEL-CONTROLLED CONDENSATE DRAIN

PRE-TREATMENT STAGE

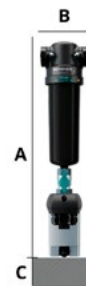
Cyclone separators reliably separate condensate and coarse dirt particles with minimal pressure drop, achieving an efficiency of 99 %. The rotational movement generated separates water, oil droplets and particles, and the condensate is automatically drained from the system.



CYCLONE SEPARATORS

RF-C 0050 - 1500

for removing large quantities of condensate and solid dirt particles from wet compressed air
 - with electric, level-controlled condensate drain
 - Max. operating pressure 16 bar



16 bar max. pressure

Model	Connection Zoll	Volume flow at 7 bar		Dimensions			Weight kg	Art.-No.
		m³/min	cfm	A [mm]	B [mm]	C [mm]		
Cyclone separator RF-C 0050	G3/8	0.83	29	375	76	70	1.3	14616 ¹
Cyclone separator RF-C 0120	G1/2	2.00	71	418	103	70	1.7	14617 ¹
Cyclone separator RF-C 0210	G1	3.50	124	503	139	70	2.7	14618 ¹
Cyclone separator RF-C 0320	G1	5.33	188	503	139	70	2.7	14619 ¹
Cyclone separator RF-C 0450	G1 1/2	7.50	265	739	190	70	5.9	14620 ²
Cyclone separator RF-C 0750	G2	12.50	441	739	190	70	5.9	14621 ²
Cyclone separator RF-C 1100	G2	18.33	647	739	190	70	5.9	14622 ²
Cyclone separator RF-C 1500	G2 1/2	25.00	883	848	248	70	6.6	18232 ²

¹incl. UFM-D 05

²incl. UFM-D 10

Conversion factor f for deviating operating pressures

Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f	0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

DESIGN EXAMPLE

$V_{nom} = 5,83 \text{ m}^3/\text{min}$, operating pressure 9 bar

$$V_{korr} = \frac{V_{nom}}{f} = \frac{5,83}{1,25} = 4,66 \text{ m}^3/\text{min}$$

Calculated size:
 4,66 m³/min -> Model RF-C 0320

OPTIONS

Connection adapter set for filter combinations	Art.-No.
Connecting piece for size 0035 - 0050	02059
Connecting piece for size 0070 - 0120	19890
Connecting piece for size 0210 - 0320	01750
Connecting piece for size 0450 - 1500	00986

FINE / MICRO / SUBMICRO FILTERS

RF-V / RF-M / RF-S

FILTRATION STAGE

These filters reliably remove even the finest oil and water aerosols, as well as solid particles, from compressed air. The multi-layer fibre fleece ensures high separation efficiency and meets the most stringent purity requirements.

HOUSING HEAD

Dip-coated die-cast aluminium housing with internal threads on the compressed air inlet and outlet for horizontal pipework installation.

Convenient fastening

The filter housing is easy to open thanks to a locked bayonet lock. This ensures a high level of operational reliability.

FILTER ELEMENT



A multi-layered, three-dimensional non-woven fabric that traps even the smallest particles.

FILTER MONITORING

The microprocessor-controlled economizer calculates the optimum time for filter replacement. This is indicated by an LED; in addition, the economizer features an alarm contact (Superplus execution). The economizer provides a simple visual red/green indicator of the filter status.



FILTER HOUSING

Robust, dip-coated filter housing for long-lasting corrosion protection, even with aggressive condensates.

CONDENSATE DRAIN

Electric, level-controlled drainage of condensate from the pressurised system. Automatic self-monitoring.

Horizontal drainage

Condensate drainage with user-friendly level control.

EXECUTIONS

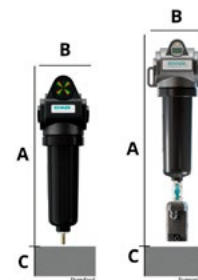
Standard model with econometer. Superplus model with economiser and level-controlled condensate drain.

Standard

Superplus

FINE FILTER RF-V 0035 - 1500

Particle separation up to 1 micron
oil separation up to <0,2 mg/m³



Model	Connection Zoll	Volume flow at 7 bar		Dimensions			Weight kg	Art.-No.
		m³/min	cfm	A [mm]	B [mm]	C [mm]		
Fine filter RF-V 0035 Standard	G3/8	0.58	20	255	76	100	0.5	14738 ¹
Fine filter RF-V 0070 Standard	G1/2	1.16	41	297	103	115	0.9	14624 ¹
Fine filter RF-V 0120 Standard	G1/2	2.00	71	340	103	150	1.0	14625 ¹
Fine filter RF-V 0210 Standard	G1	3.50	124	382	139	180	2.0	14626 ¹
Fine filter RF-V 0320 Standard	G1	5.33	188	442	139	250	2.2	14686 ¹
Fine filter RF-V 0450 Standard	G1 1/4	7.50	265	585	190	250	5.2	14627 ¹
Fine filter RF-V 0600 Standard	G1 1/2	10.00	353	585	190	250	5.2	14628 ¹
Fine filter RF-V 0750 Standard	G2	12.50	441	585	190	250	5.2	14629 ¹
Fine filter RF-V 1100 Standard	G2	18.33	647	765	190	250	7.2	14744 ¹
Fine filter RF-V 0035 Superplus	G3/8	0.58	20	405	76	100	1.6	14745 ^{2,3}
Fine filter RF-V 0070 Superplus	G1/2	1.16	41	450	103	115	2.0	14680 ^{2,3}
Fine filter RF-V 0120 Superplus	G1/2	2.00	71	495	103	115	2.1	14681 ^{2,3}
Fine filter RF-V 0210 Superplus	G1	3.50	124	535	139	180	3.1	14682 ^{2,3}
Fine filter RF-V 0320 Superplus	G1	5.33	188	595	139	250	3.3	14672 ^{2,3}
Fine filter RF-V 0450 Superplus	G1 1/4	7.50	265	740	190	250	6.7	14683 ^{2,3}
Fine filter RF-V 0600 Superplus	G1 1/2	10.00	353	740	190	250	6.7	14684 ^{2,3}
Fine filter RF-V 0750 Superplus	G2	12.50	441	740	190	250	6.7	14685 ^{2,3}
Fine filter RF-V 1100 Superplus	G2	18.33	647	840	190	250	6.9	14301 ^{2,3}
Fine filter RF-V 1500 Superplus	G2 1/2	25.00	883	812	248	250	7.3	24020 ^{2,4}

¹ Standard models including economizer and floating drain

² Superplus models incl. economizer with potential-free contact and level-controlled condensate drain

³ UFM-D 03 up to RF 1100

⁴ UFM-D 05 at 1500

Conversion factor f for deviating operating pressures

Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f	0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

DESIGN EXAMPLE

$V_{nom} = 5,83 \text{ m}^3/\text{min}$, operating pressure 9 bar

$$V_{korr} = \frac{V_{nom}}{f} = \frac{5,83}{1,25} = 4,66 \text{ m}^3/\text{min}$$

Calculated size:
4,66 m³/min -> Model RF-V 0320

OPTIONS

Connection adapter set for filter combinations	Art.-No.
Connecting piece for size 0035 - 0050	02059
Connecting piece for size 0070 - 0120	19890
Connecting piece for size 0210 - 0320	01750
Connecting piece for size 0450 - 1500	00986
Wall brackets for compressed air filter	Art.-No.
RF 0035	02060
RF 0070 - 0120 / RF-T 0050	14889
RF 0210 - 0320 / RF-T 0080 - 0110	06133
RF 0450 - 1100	00985

MAINTENANCE PARTS

Filter elements	Art.-No.
Fine filter element RF-V 0035	14707
Fine filter element RF-V 0070	14708
Fine filter element RF-V 0120	14709
Fine filter element RF-V 0210	14710
Fine filter element RF-V 0320	14644
Fine filter element RF-V 0450	14711
Fine filter element RF-V 0600	14712
Fine filter element RF-V 0750	14713
Fine filter element RF-V 1100	14751
Fine filter element RF-V 1500	01783

MICROFILTER RF-M 0035 - 1500

Particle separation up to 0,1 micron
oil separation up to <0,02 mg/m³



16 bar max. pressure

Model	Connection Zoll	Volume flow at 7 bar		Dimensions			Weight kg	Art.-No.
		m³/min	cfm	A [mm]	B [mm]	C [mm]		
Microfilter RF-M 0035 Standard	G3/8	0.58	20	255	76	100	0.5	14630 ¹
Microfilter RF-M 0070 Standard	G1/2	1.16	41	297	103	115	0.9	14631 ¹
Microfilter RF-M 0120 Standard	G1/2	2.00	71	340	103	150	1.0	14632 ¹
Microfilter RF-M 0210 Standard	G1	3.50	124	382	139	180	2.0	14633 ¹
Microfilter RF-M 0320 Standard	G1	5.33	188	442	139	250	2.2	14701 ¹
Microfilter RF-M 0450 Standard	G1 1/4	7.50	265	585	190	250	5.2	14634 ¹
Microfilter RF-M 0600 Standard	G1 1/2	10.00	353	585	190	250	5.2	14635 ¹
Microfilter RF-M 0750 Standard	G2	12.50	441	585	190	250	5.2	14636 ¹
Microfilter RF-M 1100 Standard	G2	18.33	647	765	190	250	7.2	14756 ¹
Microfilter RF-M 0035 Superplus	G3/8	0.58	20	405	76	100	1.6	14746 ^{2,3}
Microfilter RF-M 0070 Superplus	G1/2	1.16	41	450	103	115	2.0	14687 ^{2,3}
Microfilter RF-M 0120 Superplus	G1/2	2.00	71	495	103	150	2.1	14688 ^{2,3}
Microfilter RF-M 0210 Superplus	G1	3.50	124	535	139	180	3.1	14689 ^{2,3}
Microfilter RF-M 0320 Superplus	G1	5.33	188	595	139	250	3.3	14693 ^{2,3}
Microfilter RF-M 0450 Superplus	G1 1/4	7.50	265	740	190	250	6.7	14690 ^{2,3}
Microfilter RF-M 0600 Superplus	G1 1/2	10.00	353	740	190	250	6.7	14691 ^{2,3}
Microfilter RF-M 0750 Superplus	G2	12.50	441	740	190	250	6.7	14692 ^{2,3}
Microfilter RF-M 1100 Superplus	G2	18.33	647	840	190	250	6.9	14302 ^{2,3}
Microfilter RF-M 1500 Superplus	G2 1/2	25.00	883	812	248	250	7.3	24021 ^{2,4}

¹ Standard models including economizer and floating drain

² Superplus models incl. economizer with potential-free contact and level-controlled condensate drain

³ UFM-D 03 up to RF 1100

⁴ UFM-D 05 at 1500

Conversion factor f for deviating operating pressures

Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f	0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

DESIGN EXAMPLE

$V_{nom} = 5,83 \text{ m}^3/\text{min}$, operating pressure 9 bar

$$V_{korr} = \frac{V_{nom}}{f} = \frac{5,83}{1,25} = 4,66 \text{ m}^3/\text{min}$$

Calculated size:
4,66 m³/min -> Model RF-M 0320

OPTIONS

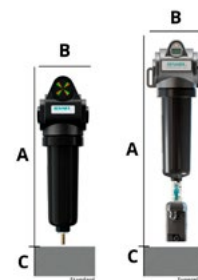
Connection adapter set for filter combinations	Art.-No.
Connecting piece for size 0035 - 0050	02059
Connecting piece for size 0070 - 0120	19890
Connecting piece for size 0210 - 0320	01750
Connecting piece for size 0450 - 1500	00986
Wall brackets for compressed air filter	Art.-No.
RF 0035	02060
RF 0070 - 0120 / RF-T 0050	14889
RF 0210 - 0320 / RF-T 0080 - 0110	06133
RF 0450 - 1100	00985

MAINTENANCE PARTS

Filter elements	Art.-No.
Microfilter element RF-M 0035	14714
Microfilter element RF-M 0070	14715
Microfilter element RF-M 0120	14716
Microfilter element RF-M 0210	14717
Microfilter element RF-M 0320	14651
Microfilter element RF-M 0450	14718
Microfilter element RF-M 0600	14719
Microfilter element RF-M 0750	14720
Microfilter element RF-M 1100	14752
Microfilter element RF-M 1500	01784

SUBMICROFILTER RF-S 0035 - 1500

Particle separation up to 0,01 micron
oil separation up to <0,01 mg/m³



16 bar max. pressure

Model	Connection Zoll	Volume flow at 7 bar		Dimensions			Weight kg	Art.-No.
		m³/min	cfm	A [mm]	B [mm]	C [mm]		
Submicrofilter RF-S 0035 Standard	G3/8	0.58	20	255	76	100	0.5	14739 ¹
Submicrofilter RF-S 0070 Standard	G1/2	1.16	41	297	103	115	0.9	14638 ¹
Submicrofilter RF-S 0120 Standard	G1/2	2.00	71	340	103	150	1.0	14639 ¹
Submicrofilter RF-S 0210 Standard	G1	3.50	124	382	139	180	2.0	14640 ¹
Submicrofilter RF-S 0320 Standard	G1	5.33	188	442	139	250	2.2	14704 ¹
Submicrofilter RF-S 0450 Standard	G1 1/4	7.50	265	585	190	250	5.2	14641 ¹
Submicrofilter RF-S 0600 Standard	G1 1/2	10.00	353	585	190	250	5.2	14642 ¹
Submicrofilter RF-S 0750 Standard	G2	12.50	441	585	190	250	5.2	14643 ¹
Submicrofilter RF-S 1100 Standard	G2	18.33	647	765	190	250	7.2	14737 ¹
Submicrofilter RF-S 0035 Superplus	G3/8	0.58	20	405	76	100	1.6	14747 ^{2,3}
Submicrofilter RF-S 0070 Superplus	G1/2	1.16	41	450	103	115	2.0	14694 ^{2,3}
Submicrofilter RF-S 0120 Superplus	G1/2	2.00	71	495	103	150	2.1	14695 ^{2,3}
Submicrofilter RF-S 0210 Superplus	G1	3.50	124	535	139	180	3.1	14696 ^{2,3}
Submicrofilter RF-S 0320 Superplus	G1	5.33	188	595	139	250	3.3	14702 ^{2,3}
Submicrofilter RF-S 0450 Superplus	G1 1/4	7.50	265	740	190	250	6.7	14697 ^{2,3}
Submicrofilter RF-S 0600 Superplus	G1 1/2	10.00	353	740	190	250	6.7	14698 ^{2,3}
Submicrofilter RF-S 0750 Superplus	G2	12.50	441	740	190	250	6.7	14699 ^{2,3}
Submicrofilter RF-S 1100 Superplus	G2	18.33	647	840	190	250	6.9	14303 ^{2,3}
Submicrofilter RF-S 1500 Superplus	G2 1/2	25.00	883	812	248	250	7.3	24022 ^{2,4}

¹ Standard models including economizer and floating drain

² Superplus models incl. economizer with potential-free contact and level-controlled condensate drain

³ UFM-D 03 up to RF 1100

⁴ UFM-D 05 at 1500

Conversion factor f for deviating operating pressures																
Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f	0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

DESIGN EXAMPLE

$V_{nom} = 5,83 \text{ m}^3/\text{min}$, operating pressure 9 bar

$$V_{korr} = \frac{V_{nom}}{f} = \frac{5,83}{1,25} = 4,66 \text{ m}^3/\text{min}$$

Calculated size:
4,66 m³/min -> Model RF-S 0320

OPTIONS

Connection adapter set for filter combinations	Art.-No.
Connecting piece for size 0035 - 0050	02059
Connecting piece for size 0070 - 0120	19890
Connecting piece for size 0210 - 0320	01750
Connecting piece for size 0450 - 1500	00986
Wall brackets for compressed air filter	Art.-No.
RF 0035	02060
RF 0070 - 0120 / RF-T 0050	14889
RF 0210 - 0320 / RF-T 0080 - 0110	06133
RF 0450 - 1100	00985

MAINTENANCE PARTS

Filter elements	Art.-No.
Submicrofilter element RF-S 0035	14721
Submicrofilter element RF-S 0070	14722
Submicrofilter element RF-S 0120	14723
Submicrofilter element RF-S 0210	14724
Submicrofilter element RF-S 0320	14658
Submicrofilter element RF-S 0450	14725
Submicrofilter element RF-S 0600	14726
Submicrofilter element RF-S 0750	14727
Submicrofilter element RF-S 1100	14753
Submicrofilter element RF-S 1500	18229

ACTIVATED CARBON FILTER

RF-A

FILTRATION STAGE

Activated carbon filters reliably remove oil vapours, hydrocarbons and odours from compressed air. The multi-stage filter structure meets the most stringent requirements for compressed air quality.

HOUSING HEAD

Dip-coated die-cast aluminium housing with internal threads on the compressed air inlet and outlet for horizontal pipework installation.

FILTER HOUSING

Robust, dip-coated filter housing for long-lasting corrosion protection, even with aggressive condensates.

Convenient fastening

The filter housing is easy to open thanks to a locking bayonet fitting. This ensures a high level of operational reliability.

FILTER ELEMENT

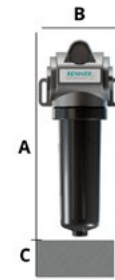


Granular activated carbon on a non-woven carrier binds pollutants by adsorption onto its large internal surface area. A microfibre non-woven fabric surrounding the activated carbon also ensures effective particle filtration.



ACTIVATED CARBON FILTER RF-A 0035 - 1500

oil separation up to <0,003 mg/m³



16 bar max. pressure

Model	Connection Zoll	Volume flow at 7 bar		Dimensions			Weight kg	Art.-No.
		m³/min	cfm	A [mm]	B [mm]	C [mm]		
Activated carbon filter RF-A 0035 Standard	G3/8	0.58	20	255	76	100	0.5	14741 ¹
Activated carbon filter RF-A 0070 Standard	G1/2	1.16	41	297	103	115	0.9	14645 ¹
Activated carbon filter RF-A 0120 Standard	G1/2	2.00	71	340	103	150	1.0	14646 ¹
Activated carbon filter RF-A 0210 Standard	G1	3.50	124	382	139	180	2.0	14647 ¹
Activated carbon filter RF-A 0320 Standard	G1	5.33	188	442	139	250	2.2	14706 ¹
Activated carbon filter RF-A 0450 Standard	G1 1/4	7.50	265	585	190	250	5.2	14648 ¹
Activated carbon filter RF-A 0600 Standard	G1 1/2	10.00	353	585	190	250	5.2	14649 ¹
Activated carbon filter RF-A 0750 Standard	G2	12.50	441	585	190	250	5.2	14650 ¹
Activated carbon filter RF-A 1100 Standard	G2	18.33	647	765	190	250	7.2	14299 ¹
Activated carbon filter RF-A 1500 Standard	G2 1/2	25.00	883	812	248	250	8.3	24023 ¹

¹ Includes econometer and sealing plug

Conversion factor f for deviating operating pressures

Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f	0,25	0,38	0,50	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

DESIGN EXAMPLE

$V_{nom} = 5,83 \text{ m}^3/\text{min}$, operating pressure 9 bar

$$V_{kor} = \frac{V_{nom}}{f} = \frac{5,83}{1,25} = 4,66 \text{ m}^3/\text{min}$$

Calculated size:
4,66 m³/min -> Model RF-A 0320

OPTIONS

Connection adapter set for filter combinations	Art.-No.
Connecting piece for size 0035 - 0050	02059
Connecting piece for size 0070 - 0120	19890
Connecting piece for size 0210 - 0320	01750
Connecting piece for size 0450 - 1500	00986
Wall brackets for compressed air filter	Art.-No.
RF 0035	02060
RF 0070 - 0120 / RF-T 0050	14889
RF 0210 - 0320 / RF-T 0080 - 0110	06133
RF 0450 - 1100	00985

MAINTENANCE PARTS

Filter elements	Art.-No.
Activated carbon filter element RF-A 0035	14728
Activated carbon filter element RF-A 0070	14729
Activated carbon filter element RF-A 0120	14730
Activated carbon filter element RF-A 0210	14731
Activated carbon filter element RF-A 0320	14665
Activated carbon filter element RF-A 0450	14732
Activated carbon filter element RF-A 0600	14733
Activated carbon filter element RF-A 0750	14734
Activated carbon filter element RF-A 1100	14754
Activated carbon filter element RF-A 1500	20324

THREE-STAGE-FILTERS

RF-T / DF-T

ALL-IN-ONE FILTER

Compressed air quality in the smallest of spaces: three-stage filters combine several filter technologies in a single compact unit and reliably remove particles, aerosols and gaseous contaminants. This produces exceptionally high-quality, virtually oil-free compressed air.

HOUSING HEAD

Dip-coated die-cast aluminium housing with internal threads on the compressed air inlet and outlet for horizontal pipework installation.

Convenient fastening

The filter housing is easy to open thanks to a locked bayonet lock. This ensures a high level of operational reliability.

FILTER HOUSING

Robust, dip-coated filter housing for long-lasting corrosion protection, even with aggressive condensates.

FILTER MONITORING

The microprocessor-controlled economizer calculates the optimum time for replacing the filter. This is indicated by an LED; the economizer also features an alarm contact.

FILTER ELEMENTS



A combination of a sub-micron filter, an activated carbon adsorber and a high-performance particulate filter for space-saving filtration of the highest standard.

CONDENSATE DRAIN

Level-controlled drainage of condensate from the pressurised system using a float-operated drain.

Up to **60%**
Space-saving
opposite
conventional
Solutions

Three-filter combination



All-in-one filter



COST-EFFECTIVE FILTER SOLUTION

The combination of depth filtration and adsorption ensures a consistently high standard of compressed air quality.

THREE-STAGE-FILTERS

RF-T 0050 - 0110

DF-T 0050 - 0110 SILICONE-FREE

- With economizer and KA 1/2" condensate drain
- Quality class 1 according to ISO 8573-1:2010



16 bar max. pressure

Model	Connection Zoll	Volume flow at 7 bar		Dimensions			Art.-No.
		m³/min	cfm	A [mm]	B [mm]	C [mm]	
Complete filter RF-T 0050	G1/2	0.83	29	341	103	150	14652
Complete filter RF-T 0080	G3/4	1.33	47	382	139	180	14653
Complete filter RF-T 0110	G1	1.83	65	442	139	250	14654
Filter Complete DF-T0050	G1/2	0.83	29	341	103	150	13676 ¹
Filter complete DF-T 0080	G3/4	1.33	47	382	139	180	13677 ¹
Filter complete DF-T 0110	G1	1.83	65	442	139	250	13678 ¹

¹ Silicone and release agent-free filter elements and housings

Filter performance data under the following defined operating conditions & at nominal flow rate			Filter element cross-section
Admission	Operating pressure	7 bar	 3 High-performance Particle filter 2 Activated carbon Adsorber 1 Coalescing filter
	Operating temperature ⁽¹⁾	20°C	
	Oil aerosol content, entry	3 mg/m³	
	Moisture content	50% relative humidity, corresponds to a pressure dew point of approx. +10°C at 20°C operating temperature	
Exit	Compressed air quality class according to ISO 8573-1:2010 for oil	< 0,003 mg/m³, class 1	
	Compressed air quality class according to ISO 8573-1:2010 for solid particles	Class 1	
	Differential pressure in new condition, dry	330 mbar	
	Service life of the activated carbon stage	2000 operating hours	

⁽¹⁾ The recommended maximum operating temperature is 30°C, as the service life of the filter is reduced as the temperature rises (at 30°C, the service life for a mineral oil ISO 46 is approx. 1000 operating hours).

Conversion factor f for deviating operating pressures

Operating pressure (bar)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f	0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

DESIGN EXAMPLE

$V_{nom} = 1,66 \text{ m}^3/\text{min}$, operating pressure 9 bar

$$V_{kor} = \frac{V_{nom}}{f} = \frac{1,66}{1,25} = 1,33 \text{ m}^3/\text{min}$$

Calculated size:
0,79 m³/min -> Model RF-T 0080

OPTIONS

Connection adapter set for filter combinations	Art.-No.
Connecting piece for size 0035 - 0050	02059
Connecting piece for size 0070 - 0120	19890
Wall brackets for compressed air filter	Art.-No.
RF 0070 - 0120 / RF-T 0050	14889
RF 0210 - 0320 / RF-T 0080 - 0110	06133

Three-stage filter element consisting of a submicro coalescence filter stage, activated carbon stage and high-performance particle filter (quality class 1 according to ISO 8573-1:2010) with differential pressure gauge, economiser incl. float trap.

MAINTENANCE PARTS

Filter elements	Art.-No.
Filter element RF-T 0050	14740
Filter element RF-T 0080	14742
Filter element RF-T 0110	14743
Filter element DF-T 0050	13679 ¹
Filter element DF-T 0080	13680 ¹
Filter element DF-T 0110	13681 ¹

Three-stage filter element consisting of submicro coalescence filter stage, activated carbon stage and high-performance particle filter (quality class 1 in accordance with ISO 8573-1:2010) with differential pressure gauge, economizer incl. float drain

¹ Silicone and release agent-free filter elements and housings

Three-stage filter element consisting of a submicro coalescence filter stage, activated carbon stage and high-performance particle filter (quality class 1 according to ISO 8573-1:2010) with differential pressure gauge, economiser incl. float trap.

REFRIGERATED DRYERS

RKT-A / RKT-S / DV

COMPRESSED AIR DRYING

Refrigeration dryers cool the compressed air immediately after compression, reliably condensing moisture and automatically draining it away. In this way, the refrigeration dryer effectively protects the entire compressed air system from corrosion, wear and malfunctions, and ensures a consistently dry supply of compressed air whilst taking up minimal space. Contains the environmentally friendly R513A refrigerant with a low GWP. The RKT-A can be mounted directly onto RENNER compressors, enabling compact and direct compressed air treatment right at the compressor. [Dew point of the RKT-A: +3°C](#)

EVAPORATOR

The condenser is responsible for converting the gaseous refrigerant into a liquid.

AXIAL FAN

The axial fan ensures an optimum flow of cooling air within the refrigeration dryer and expels the cooling air.

CONTROL SYSTEM

On/off switch and electronic controller for monitoring status and dew point.

HEAT EXCHANGER

In the heat exchanger, the incoming warm compressed air is cooled by the cold compressed air leaving the refrigeration dryer. The cooled compressed air is then further cooled to the dew point by the refrigerant circuit.

HOT GAS BYPASS VALVE

The hot gas bypass valve regulates the cooling capacity to maintain the dew point.

REFRIGERANT COMPRESSOR

The refrigerant compressor compresses the gaseous refrigerant to a higher pressure so that it can be fed into the refrigerant circuit.

CONDENSATE DRAIN

Electric, time- or level-controlled drainage of condensate (depending on the model and version) from the pressurised system. Automatic self-monitoring.



RKT-S

[Pressure dew point +5°C](#)

Standalone refrigeration dryer for existing or larger compressed air systems.



DV

[Dew point +3°C](#)

Designed for larger applications and continuous industrial use.

REFRIGERATION DRYER

RKT-1A 0035 - 0450

- Can be mounted on RENNER compressors
- Electronic control
- Time-controlled/level-controlled condensate drain



Pressure dew point
+5°C

¹ R513A
Refrigerant

Model	Volume flow		power consumption kW	Pressure drop bar	Connection Zoll	Dimensions			Weight kg	Art.-No.	
	cfm	m³/min				L [mm]	W [mm]	H [mm]		level-controlled Condensate drain	Time-controlled Condensate drain
RKT-1A 0035	20	0.58	0,16	0,10	G1/2	255	455	626	29.0	34394 ¹	34387 ¹
RKT-1A 0050	29	0.83	0,19	0,08	G1/2	255	455	626	29.0	34395 ¹	34388 ¹
RKT-1A 0065	38	1.08	0,21	0,10	G1/2	255	455	626	29.0	34396 ¹	34389 ¹
RKT-1A 0085	50	1.42	0,29	0,07	G1	275	455	708	37.0	34397 ¹	34390 ¹
RKT-1A 0105	62	1.75	0,30	0,09	G1	275	455	708	37.0	34398 ¹	34391 ¹
RKT-1A 0125	73	2.08	0,31	0,11	G1	345	525	851	45.0	34399 ¹	34392 ¹
RKT-1A 0150	88	2.50	0,52	0,07	G1 1/4	345	525	851	50	34400 ¹	34393 ¹
RKT-1A 0180	106	3.00	0,53	0,09	G1 1/4	345	525	851	54	34401 ¹	
RKT-1A 0225	132	3.75	0,55	0,12	G1 1/4	345	525	851	62	34402 ¹	
RKT-1A 0300	177	5.00	0,84	0,11	G1 1/2	350	668	1,061	74	34403 ¹	
RKT-1A 0360	212	6.00	1,00	0,14	G1 1/2	350	668	1,061	77	34404 ¹	
RKT-1A 0450	265	7.50	1,60	0,21	G1 1/2	350	668	1,061	79	34405 ¹	

Electrical connection: 230 V / 50 Hz / 1 phase. According to ISO 7183 (at 1 bar absolute and 20°C, pressure dew point +3°C at a compressed air inlet temperature of 35°C, 25°C ambient temperature and 7 bar). Refrigeration dryers with a level-controlled condensate drain have an integrated potential-free contact that is activated when the dryer malfunctions. Max. operating pressure 16 bar (RKT-1A 0035 – 0065) or 14 bar (RKT-1A 0085 – 0450).

¹ Refrigeration Dryer with Refrigerant R513A

Conversion tables for corrected dryer performance																	
Operating pressure (bar)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Factor f_p	0,60	0,70	0,80	0,88	0,94	1,00	1,04	1,06	1,09	1,10	1,12	1,14	1,15	1,16	1,17		
Pressure dew point (°C)	3		5	7	10	Ambient temperatur (°C)						25	30	35	40	45	
Factor f_{pd}	1,00		1,12	1,24	1,36	Factor f_a						1,00	0,97	0,94	0,87	0,78	
Compressed air inlet temperature (°C)	30		35	40	45	50	55	Corrected dryer performance:								Inlet volume	
Factor f_t	1,17		1,00	0,88	0,75	0,58	0,48									(f. x f_b x f_a x f_{pd})	

OPTIONS

bypass line	Art.-No.
Bypass line 1/2 "	34287
Bypass line 1"	34288
Bypass line 1 1/42 "	34289
Bypass line 1 1/2 "	34290

COMPRESSED AIR REFRIGERATION DRYER RKT-1S 0020 - 1000

electronic control
Time-controlled/level-controlled condensate drain



Pressure dew point
+5°C

¹R513A
Refrigerant

Model	Volume flow		power consumption kW	Pressure drop bar	Connection Zoll	Dimensions			Weight kg	Art.-No.	
	cfm	m³/min				L [mm]	W [mm]	H [mm]		level-controlled Condensate drain	Time-controlled Condensate drain
RKT-1S 0020	12	0.33	0,11	0,05	G3/8	360	410	645	26.0	34369 ¹	34351 ¹
RKT-1S 0035	20	0.58	0,15	0,07	G1/2	360	410	645	26.0	34370 ¹	34352 ¹
RKT-1S 0050	29	0.83	0,16	0,13	G1/2	360	410	645	26.0	34371 ¹	34353 ¹
RKT-1S 0065	38	1.08	0,17	0,08	G1/2	360	410	645	27.0	34372 ¹	34354 ¹
RKT-1S 0085	50	1.42	0,30	0,14	G1/2	360	410	645	33.0	34373 ¹	34355 ¹
RKT-1S 0105	62	1.75	0,31	0,21	G1/2	360	410	645	33.0	34374 ¹	34356 ¹
RKT-1S 0125	73	2.08	0,32	0,10	G1	360	410	645	34.0	34375 ¹	34357 ¹
RKT-1S 0150	88	2.50	0,33	0,12	G1	360	410	645	34.0	34376 ¹	34358 ¹
RKT-1S 0180	106	3.00	0,50	0,18	G1 1/4	480	660	870	36.0	34377 ¹	34359 ¹
RKT-1S 0225	132	3.75	0,56	0,10	G1 1/4	480	660	870	53	34378 ¹	34360 ¹
RKT-1S 0300	177	5.00	0,57	0,19	G1 1/4	480	660	870	55	34379 ¹	34361 ¹
RKT-1S 0360	212	6.00	0,92	0,12	G1 1/2	480	660	870	63	34380 ¹	34362 ¹
RKT-1S 0450	265	7.50	0,93	0,23	G1 1/2	480	660	870	63	34381 ¹	34363 ¹
RKT-1S 0550	324	9.17	1,50	0,11	G2	645	920	1,055	103	34382 ¹	34364 ¹
RKT-1S 0650	382	10.83	1,40	0,17	G2	645	920	1,055	108	34383 ¹	34365 ¹
RKT-1S 0750	441	12.50	1,50	0,21	G2	645	920	1,055	108	34384 ¹	34366 ¹
RKT-1S 0850	500	14.17	1,70	0,10	G2	645	920	1,055	126	34385 ¹	34367 ¹
RKT-1S 1000	589	16.67	1,80	0,16	G2	645	920	1,055	128	34386 ¹	34368 ¹

Electrical connection: 230 V / 50 Hz / 1 phase. According to ISO 7183 (at 1 bar absolute and 20°C, pressure dew point 5°C at a compressed air inlet temperature of 35°C, 25°C ambient temperature and 7 bar). In refrigeration dryers with a level-controlled condensate drain, a potential-free contact is integrated in the event of a dryer malfunction. Max. operating pressure 16 bar (RKT-1S 0020 – 1000).

Refrigeration Dryer with Refrigerant R513A

Conversion tables for corrected dryer performance

Operating pressure (bar)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Factor f_p	0,60	0,70	0,80	0,88	0,94	1,00	1,04	1,06	1,09	1,10	1,12	1,14	1,15	1,16	1,17	
Pressure dew point (°C)	3	5	7	10	Ambient temperatur (°C)							25	30	35	40	45
Factor f_{pd}	0,90	1,00	1,11	1,25	Factor f_{la}							1,00	0,97	0,94	0,87	0,78
Compressed air inlet temperature (°C)	30	35	40	45	50	55	Corrected dryer performance:							Inlet volume		
Factor f_t	1,17	1,00	0,88	0,75	0,58	0,48								($f_p \times f_b \times f_{la} \times f_{pd}$)		

OPTIONS

bypass line	Art.-No.
Bypass line 1/2 "	34287
Bypass line 1 "	34288
Bypass line 1 1/42 "	34289
Bypass line 1 1/2 "	34290
Bypass line 2 "	34291

COMPRESSED AIR REFRIGERATION DRYER DV 1260 – 2000 AVS



14 bar max. pressure

- each with microprocessor control and level-controlled condensate drain

DV 1260 – 2000 AB (HOT GAS BYPASS CONTROL / WITHOUT ENERGY-SAVING CONTROL)

Model	Volume flow		power consumption kW	Pressure drop bar	DIN flange connection	Dimensions			Weight kg	Art.-No.
	cfm	m³/min				L [mm]	W [mm]	H [mm]		
DV 1260	742	21.00	2,60	0,21	DN 80	790	1,000	1,590	229	20715
DV 1650	989	28.00	3,10	0,16	DN 80	790	1,000	1,590	262	20716
DV 1800	1,059	30.00	3,50	0,18	DN 80	790	1,000	1,590	263	20717
DV 2000	1,176	33.30	3,50	0,21	DN 80	790	1,000	1,590	298	20718

Electrical connection: 230 V / 50 Hz / 1 phase (DC 1000 AES) or 400 V / 50 Hz / 3 phases (DC 1175 AES). In accordance with ISO 7183 (at 1 bar absolute and 20°C, pressure dew point +3°C at a compressed air inlet temperature of 35°C, 25°C ambient temperature and 7 bar). Includes potential-free contact in the event of a dryer malfunction. Please enquire for larger volumetric flows.

DV 1260 – 2000 AVS (VARIABLE SPEED CONTROL)

Model	Volume flow		power consumption kW	Pressure drop bar	DIN flange connection	Dimensions			Weight kg	Art.-No.
	cfm	m³/min				L [mm]	W [mm]	H [mm]		
DV 1260 AVS	742	21.00	2,20	0,21	DN 80	790	1,000	1,590	248	20719
DV 1650 AVS	989	28.00	3,10	0,16	DN 80	790	1,000	1,590	282	20720
DV 1800 AVS	1,059	30.00	3,50	0,18	DN 80	790	1,000	1,590	317	20721
DV 2000 AVS	1,165	33.00	3,90	0,21	DN 80	790	1,000	1,590	317	20722

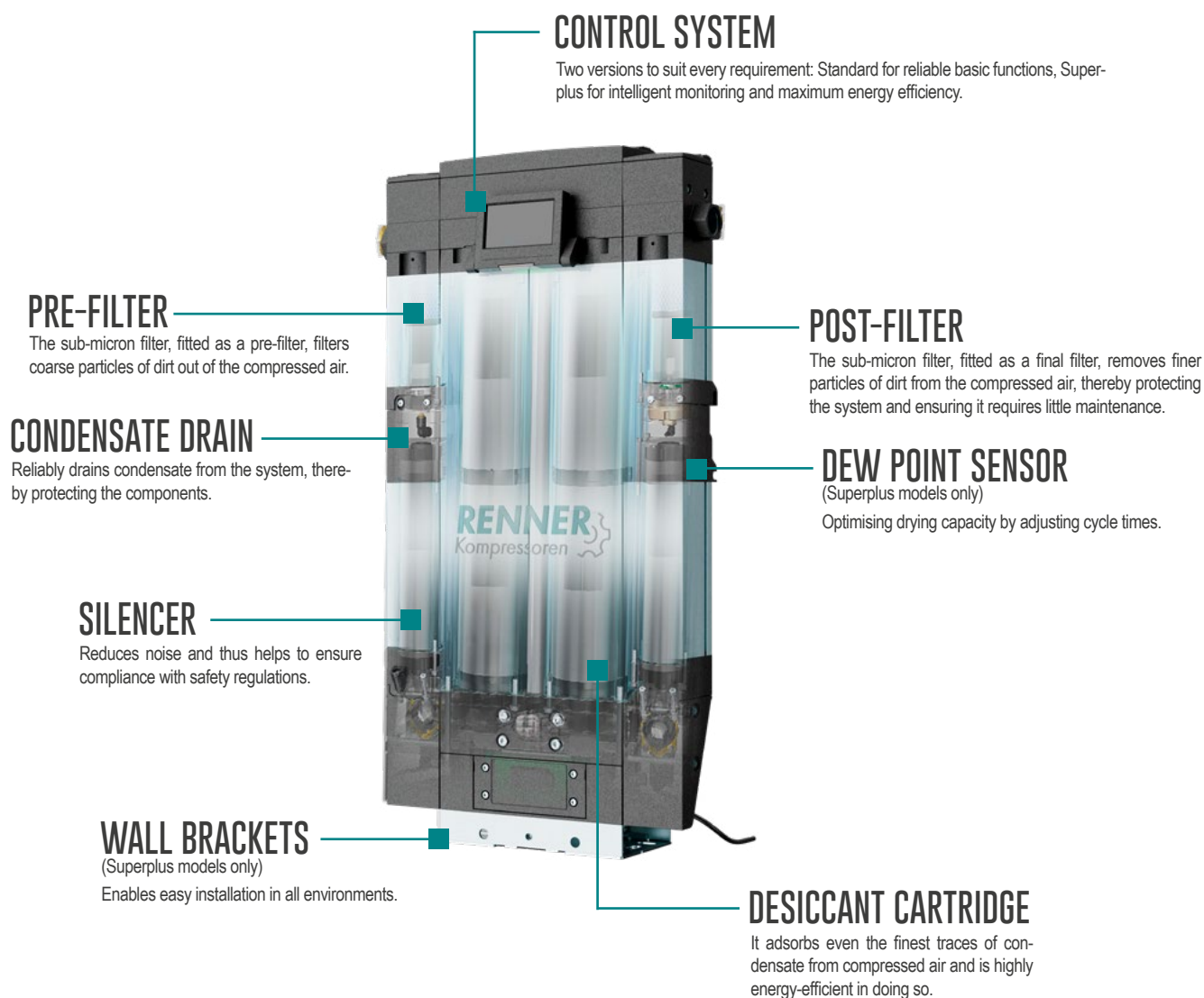
Electrical connection: 230 V / 50 Hz / 1 phase (DC 1000 AES) or 400 V / 50 Hz / 3 phases (DC 1175 AES). In accordance with ISO 7183 (at 1 bar absolute and 20°C, pressure dew point +3°C at a compressed air inlet temperature of 35°C, 25°C ambient temperature and 7 bar). Includes potential-free contact in the event of a dryer malfunction. Please enquire for larger volumetric flows. The variable speed control optimizes the airflow to reduce energy consumption.

Conversion tables for corrected dryer performance											
Operating pressure (bar)	2	3	4	5	6	7	8	9	10	12	14
Factor f_p	0,49	0,66	0,77	0,86	0,93	1,00	1,05	1,06	1,14	1,21	1,27
Pressure dew point (°C)	3	5	7	10	Ambient temperature (°C)						
Factor f_{pd}	1,00	1,09	1,19	1,37	Factor f_a						
						25	30	35	40	45	50
						1,00	0,96	0,90	0,82	0,72	0,60
Compressed air inlet temperature (°C)	30	35	40	45	50	55	60	65	70	Corrected dryer performance: Inlet volume	

ADSORPTION DRYER RAT-S

COMPRESSED AIR DRYING

The RAT-S series adsorption dryers ensure exceptionally dry compressed air. This compact system, comprising filters, a condensate drain and desiccant cartridges, offers efficient treatment, simple maintenance and a high level of operational reliability.



ADSORPTION DRYER RAT-S 0005 - 0100

- Heatless adsorption dryer
- with integrated pre- and post-filter
- pressure dew point -40°C
- sound level 60 dB(A)
- according to ISO 8573-1:2010



Model	Volume flow at 7 bar nominal ¹		Connection Zoll	Dimensions			Weight kg	Art.-No.
	cfm	m ³ /min		L [mm]	W [mm]	H [mm]		
RAT-S 0005	3	0.08	G1/2	314	137	490	10.0	21660
RAT-S 0005	3	0.08	G1/2	314	114	497	10.0	21661 ²
RAT-S 0010	6	0.17	G1/2	314	137	757	15.0	21662
RAT-S 0010	6	0.17	G1/2	314	114	764	15.0	21663 ²
RAT-S 0015	9	0.25	G1/2	314	137	1,024	21.0	21664
RAT-S 0015	9	0.25	G1/2	314	114	1,031	21.0	21665 ²
RAT-S 0020	12	0.33	G1/2	314	137	1,291	26.0	21666
RAT-S 0020	12	0.33	G1/2	314	114	1,298	26.0	21667 ²
RAT-S 0025	15	0.42	G1/2	314	137	1,558	31.0	21668
RAT-S 0025	15	0.42	G1/2	314	114	1,565	31.0	21669 ²
RAT-S 0035	20	0.58	G1	464	191	849	34.0	21670
RAT-S 0035	20	0.58	G1	464	168	866	34.0	21671 ²
RAT-S 0050	29	0.83	G1	464	191	1,113	45.0	21672
RAT-S 0050	29	0.83	G1	464	168	1,130	45.0	21673 ²
RAT-S 0065	38	1.08	G1	464	191	1,377	57	21674
RAT-S 0065	38	1.08	G1	464	168	1,394	57	21675 ²
RAT-S 0080	47	1.33	G1	464	191	1,641	68	21676
RAT-S 0080	47	1.33	G1	464	168	1,658	68	21677 ²
RAT-S 0100	59	1.67	G1	464	191	1,905	79	21678
RAT-S 0100	59	1.67	G1	464	168	1,922	79	21679 ²

¹ according to ISO 7183 (at 1 bar absolute and 20°C, at a compressed air inlet temperature of 35°C)

² Superplus models incl. dew point transmitter and dew point-dependent capacity control, touch display, electrical connection: 230 V / 50 Hz / 1 phase. Operating pressure 4-16 bar (RAT-S 0005 - 0025) or 4-12 bar (RAT-S 0035 - 0100)

Conversion table for corrected dryer capacity													
Factor f	4 bar	5 bar	6 bar	7 bar	8 bar	9 bar	10 bar	11 bar	12 bar	13 bar	14 bar	15 bar	16 bar
20°C	0,91	0,99	1,08	1,16	1,23	1,30	1,37	1,43	1,49	1,55	1,61	1,66	1,72
25°C	0,89	0,98	1,07	1,15	1,22	1,29	1,36	1,42	1,47	1,53	1,59	1,65	1,70
30°C	0,83	0,97	1,06	1,13	1,21	1,27	1,34	1,40	1,46	1,51	1,56	1,62	1,67
35°C	0,63	0,75	0,88	1,00	1,12	1,25	1,33	1,39	1,45	1,50	1,55	1,60	1,65
40°C	0,48	0,57	0,67	0,76	0,86	0,95	1,05	1,14	1,24	1,33	1,43	1,52	1,62
45°C	0,37	0,44	0,51	0,58	0,66	0,73	0,81	0,88	0,95	1,03	1,10	1,17	1,25
50°C	0,28	0,34	0,40	0,46	0,51	0,57	0,63	0,68	0,74	0,79	0,85	0,91	0,97
55°C	0,22	0,27	0,31	0,36	0,40	0,44	0,49	0,53	0,58	0,62	0,67	0,71	0,76

Example of a design on page 23.

MAINTENANCE PARTS

Service-Kit	Art.-No.	Carepac	Art.-No.
Service-Kit RAT-S 0005-0025	23956 ¹	Carepac RAT-S 0005	23966 ²
Service-Kit RAT-S 0035-0050	23962 ¹	Carepac RAT-S 0010	23967 ²
Service-Kit RAT-S 0065	23963 ¹	Carepac RAT-S 0015	23968 ²
Service-Kit RAT-S 0080-0100	23964 ¹	Carepac RAT-S 0020	23969 ²
		Carepac RAT-S 0025	23970 ²
		Carepac RAT-S 0035	23971 ²
		Carepac RAT-S 0050	23972 ²
		Carepac RAT-S 0065	23973 ²
		Carepac RAT-S 0080	23974 ²
		Carepac RAT-S 0100	23975 ²

¹ Service kit includes: Filter elements, wear parts sets, solenoid valves, wear parts set, condensate drain, wear parts set, changeover valve, O-rings

² Carepac contains: Filter elements, wear part set for solenoid valves, wear part set for Condensate drains, wear part set for shuttle valves, O-rings, silencers, desiccant cartridges

ADSORPTION DRYER

RAT-40

COMPRESSED AIR DRYING

RAT-40 adsorption dryers produce exceptionally dry compressed air for applications requiring low residual moisture levels. Two tanks operating in alternation ensure a consistently high drying capacity, whilst pre- and post-filters and a condensate drain support reliable Compressed Air Treatment. The open design allows easy access to all components.

CONTROL SYSTEM

The control system provides reliable and efficient control via dew-point-dependent capacity control and a text display.

PRE-FILTER

The sub-micron filter, fitted as a pre-filter, filters coarse particles of dirt out of the compressed air.

POST-FILTER

The sub-microfilter, fitted as a secondary filter, filters finer particles of dirt out of the compressed air, thereby protecting the system and ensuring it requires little maintenance.

CONDENSATE DRAIN

It reliably removes moisture from the system, thereby protecting the components.

DESICCANT

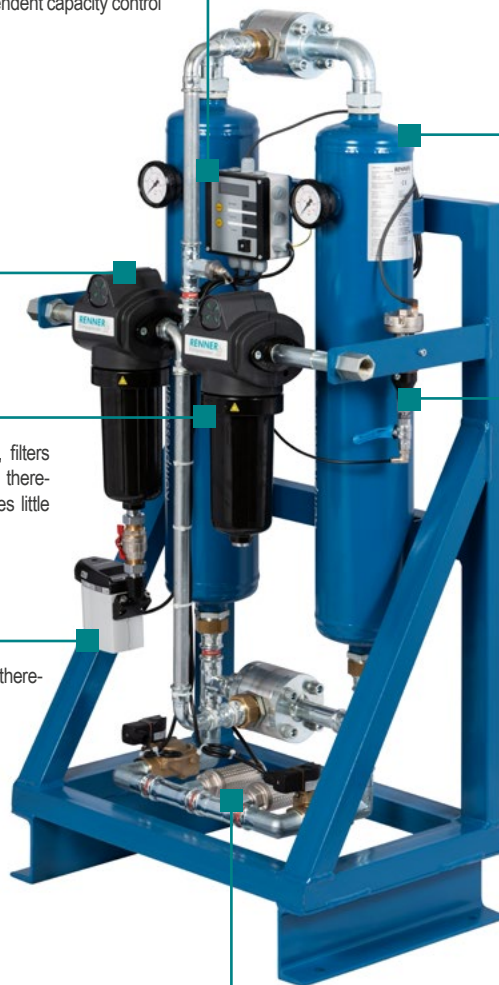
It adsorbs even the finest traces of water from the compressed air whilst operating very energy-efficiently.

DEW POINT SENSOR

Optimising drying capacity by adjusting cycle times.

SILENCER

Reduces noise and thus helps to ensure compliance with safety regulations.



ADSORPTION DRYER RAT-40 0100 - 1650



- Heatless adsorption dryer
- with integrated pre- and post-filter
- Superplus models include dew point-dependent capacity control and text display, electrical connection: 230 V / 50 Hz / 1 phase. Operating pressure 4-16 bar (RAT-40 0100 - 1000) or 4-10 bar (RAT-40 1350 - 1650)
- Pressure dew point -40°C (RAT-70 with pressure dew point -70°C on request)
- in accordance with ISO 8573-1:2010

Model	Volume flow at 7 bar nominal ¹		Pressure drop bar	Connection inch / DIN flange	Dimensions			Weight kg	Art.-No.
	cfm	m³/min			L [mm]	W [mm]	H [mm]		
RAT-40 0100	59	1.67	0,09	G1	700	450	1,600	155	13738
RAT-40 0150	88	2.50	0,14	G1	700	450	2,025	185	13739
RAT-40 0175	103	2.92	0,08	G1	850	600	1,905	245	13740
RAT-40 0225	132	3.75	0,09	G1 1/2	870	600	1,905	245	13741
RAT-40 0300	177	5.00	0,13	G1 1/2	920	650	1,890	290	13742
RAT-40 0375	221	6.25	0,15	G1 1/2	920	650	2,220	370	13743
RAT-40 0550	324	9.17	0,15	G2	1,190	750	2,180	400	13744
RAT-40 0650	382	10.83	0,19	G2	1,190	750	2,180	475	23072
RAT-40 0850	500	14.17	0,22	G2	1,320	850	2,315	565	13746
RAT-40 1000	589	16.67	0,19	G2	1,320	850	2,330	646	13747
RAT-40 1350	795	22.50	0,19	DN 80	1,500	950	2,555	1230	24117
RAT-40 1650	971	27.50	0,23	DN 80	1,700	1,050	2,365	1400	24118

¹ according to ISO 7183 (at 1 bar absolute and 20°C, at a compressed air inlet temperature of 35°C)

Conversion table for corrected dryer capacity

Factor f	4 bar	5 bar	6 bar	7 bar	8 bar	9 bar	10 bar	11 bar	12 bar	13 bar	14 bar	15 bar	16 bar
25°C	0,75	0,90	1,05	1,20	1,35	1,50	1,65	1,80	1,95	2,10	2,25	2,40	2,55
30°C	0,69	0,83	0,96	1,10	1,24	1,38	1,51	1,65	1,79	1,93	2,06	2,20	2,34
35°C*	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

*Factors for compressed air inlet temperature > 35°C on request

DESIGN EXAMPLE

$V_{nom} = 3,34 \text{ m}^3/\text{min}$, inlet temperature 30°C
operating pressure 10 bar

$$V_{kor} = \frac{V_{nom}}{f} = \frac{3,34}{1,51} = 2,2 \text{ m}^3/\text{min}$$

Calculated size:
2,2 m³/min -> Model RAT-40 0150

MAINTENANCE PARTS

Carepac	Art.-No.	Service-Kit	Art.-No.
Carepac RAT-40 0100	23979 ¹	Service-Kit RAT-40 + RAT-70 0100	24003 ²
Carepac RAT-40 0150	23980 ¹	Service-Kit RAT-40 + RAT-70 0150	24004 ²
Carepac RAT-40 0175	23981 ¹	Service-Kit RAT-40 + RAT-70 0175	24005 ²
Carepac RAT-40 0225	23982 ¹	Service-Kit RAT-40 + RAT-70 0225	24006 ²
Carepac RAT-40 0300	23983 ¹	Service-Kit RAT-40 + RAT-70 0300	24007 ²
Carepac RAT-40 0375	23984 ¹	Service-Kit RAT-40 + RAT-70 0375	24008 ²
Carepac RAT-40 0550	23985 ¹	Service-Kit RAT-40 + RAT-70 0550	24009 ²
Carepac RAT-40 0650	23986 ¹	Service-Kit RAT-40 + RAT-70 0650	24010 ²
Carepac RAT-40 0850	23987 ¹	Service-Kit RAT-40 + RAT-70 0850	24011 ²
Carepac RAT-40 1000	23988 ¹	Service-Kit RAT-40 + RAT-70 1000	24012 ²
Carepac RAT-40 1350	24014 ³	Service-Kit RAT-40 + RAT-70 1350	24018 ⁴
Carepac RAT-40 1650	24015 ³	Service-Kit RAT-40 + RAT-70 1650	24019 ⁴

¹ Carepac includes: filter elements, wear part sets for solenoid valves, wear part sets for shuttle valves, wear part set for condensate drains, O-rings, seal set for gas distributors, silencers, desiccant (replacement filling)

² Service Kit includes: filter elements, wear part sets for solenoid valves, wear part sets for condensate drains, O-rings, silencers

³ Carepac includes: filter elements, wear part sets for solenoid valves, wear part sets for shuttle valves, wear part set for condensate drains, O-rings, seal set for gas distributors, silencers, desiccant (replacement filling)

⁴ Service kit includes: filter elements, condensate drain parts set, seals, silencer

ACTIVATED CARBON ADSORBER

RAK

ADSORPTION STAGE

Activated carbon adsorbers reliably remove oil vapours, hydrocarbons and odours and flavour compounds from compressed air. When used in combination with pre- and post-filters, they ensure the highest quality of compressed air and a long service life.

ALUMINIUM HOUSING

As the adsorber is secured with four screws, it can be replaced quickly and easily.

ACTIVATED CARBON FILLING

The activated carbon it contains binds pollutants such as oil vapours, organic compounds and solvents through adsorption.

RAK 0035 – 0105 Activated Carbon Adsorber

COMPRESSED AIR MANOMETER

Makes it easy to check the system pressure.

ACTIVATED CARBON FILLING

The activated carbon it contains binds pollutants such as oil vapours, organic compounds and solvents through adsorption.

RAK 0110 – 1500 activated carbon adsorber



OIL TEST INDICATOR

The saturation of the activated carbon is indicated by an Oil test indicator.

ACTIVATED CARBON ADSORBER RAK 0035 – 1500

Activated carbon adsorber for removing oil vapors and hydrocarbons



Model	Volume flow at 7 bar nominal ¹		Connection inch / DIN flange	Dimensions			Weight kg	Art.-No.
	cfm	m³/min		L [mm]	W [mm]	H [mm]		
RAK 0035	20	0.58	G3/8	164	130	1,466	11.1	24085
RAK 0060	35	1.00	G1/2	212	160	1,082	17.4	24086
RAK 0075	44	1.25	G1/2	212	160	1,277	20.3	24087
RAK 0105	62	1.75	G1/2	212	160	1,677	26.0	24088
RAK 0110	65	1.83	G1	350	287	1,545	45.0	24089 ²
RAK 0150	88	2.50	G1	350	287	1,795	52	24090 ²
RAK 0200	118	3.33	G1	400	318	1,550	71	24091 ²
RAK 0250	147	4.17	G1	400	318	1,800	83	24092 ²
RAK 0300	177	5.00	G1 1/2	450	373	1,565	97	24093 ²
RAK 0400	236	6.67	G1 1/2	450	373	1,815	114	24094 ²
RAK 0580	341	9.67	G1 1/2	450	425	1,880	160	24095 ²
RAK 0770	453	12.83	G2	650	452	1,930	201	24096 ²
RAK 1000	589	16.67	G2	600	503	1,982	242	24097 ²
RAK 1200	706	20.00	DN 50	550	590	2,100	280	24098 ²
RAK 1500	883	25.00	DN 65	620	650	2,110	355	24099 ²

¹ according to ISO 7183 (at 1 bar absolute and 20°C, at a compressed air inlet temperature of 35°C) | ² incl. oil indicator

Conversion tables for the corrected adsorber capacity

Operating pressure (bar)	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor f_p	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13
Compressed air inlet temperature (°C)	20		25	30	35	40	45	50					
Factor f_t	1.00		0.98	0.97	0.92	0.86	0.75	0.60					

DESIGN EXAMPLE

$V_{nom} = 5.83 \text{ m}^3/\text{min}$, inlet temperature 30°C,
operating pressure 10 bar

$$V_{korr} = \frac{V_{nom}}{f_p \times f_t} = \frac{5.83}{1.38 \times 0.97} = 4.35 \text{ m}^3/\text{min}$$

Calculated size:
4.35 m³/min -> Model RAK 0300

MAINTENANCE PARTS

Service-Kit	Art.-No.
Service-Kit RAK 0035	24102 ²
Service-Kit RAK 0060	24103 ²
Service-Kit RAK 0075	24104 ²
Service-Kit RAK 0105	24105 ²
Service-Kit RAK 0110	24106 ²
Service-Kit RAK 0150	24107 ²
Service-Kit RAK 0200	24108 ²
Service-Kit RAK 0250	24109 ²
Service-Kit RAK 0300	24110 ²
Service-Kit RAK 0400	24111 ²
Service-Kit RAK 0580	24112 ²
Service-Kit RAK 0770	24113 ²
Service-Kit RAK 1000	24114 ²
Service-Kit RAK 1200	24115 ²
Service-Kit RAK 1500	24116 ²

Oil check indicator for RAK 0110 - 1500	Art.-No.
Oil test indicator	24100
Service kit oil test indicator	24101 ¹

¹ Service kit includes: replacement test tube | ² Service kit includes: Activated carbon filling

ELECTRIC BALL VALVE RKE 1/2" – 2"

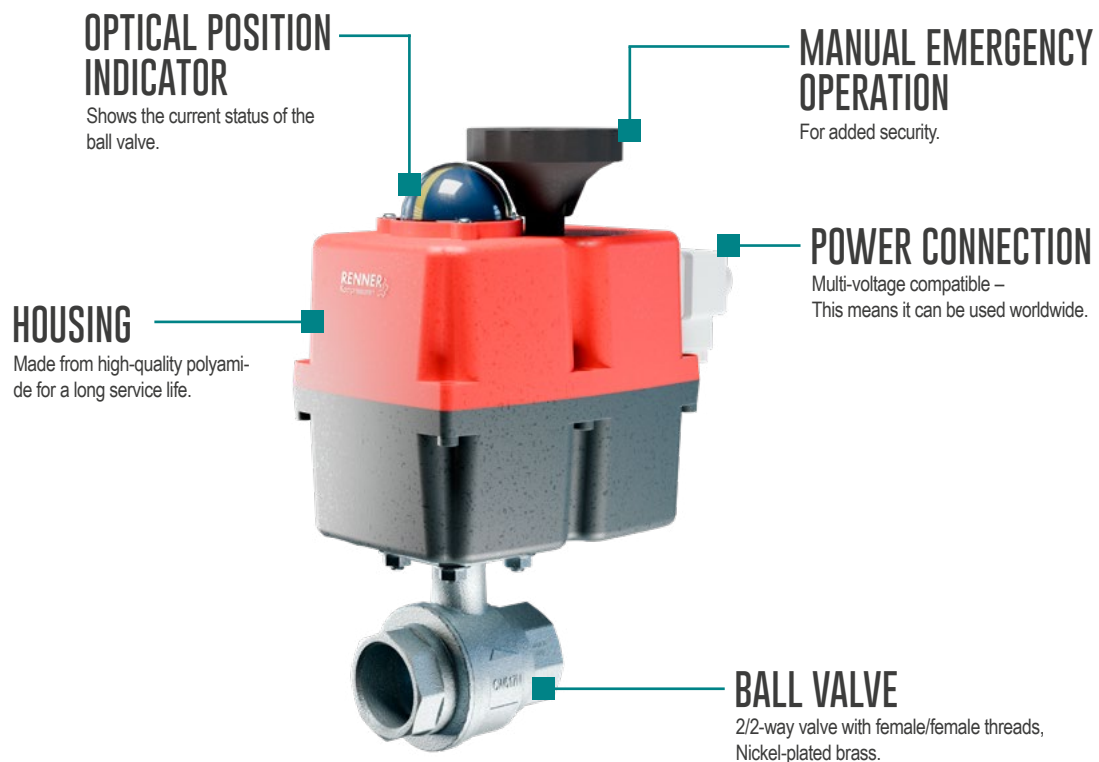
- 16 bar max. differential pressure
- Opening and closing time of 140 seconds (long-running)
- Power supply: 24V - 240V AC/DC (MULTIVOLT capable)
- 2/2-way brass fitting with internal thread
- Control room heating, manual override
- Optical position indicator, LED status display
- Torque shut-off
- Temperature range from -20°C to +70°C



Model	Connection Zoll	Fitting length mm	max. pressure bar	Art.-No.
RKE 1/2"	G1/2	75	40.0	33510
RKE 3/4"	G3/4	80	40.0	33511
RKE 1"	G1	90	40.0	33512
RKE 1 1/4"	G1 1/4	110	40.0	33513
RKE 1 1/2"	G1 1/2	120	40.0	33514
RKE 2"	G2	140	40.0	33515

COMPRESSED AIR ACCESSORIES

The RKE electric ball valve enables the reliable shut-off and control of compressed air. The electric drive ensures defined switching times and controlled system operation, whilst the multi-voltage power supply allows for flexible integration.



OIL-WATER SEPARATION SYSTEMS

- for mineral and synthetic oil
- residual oil content < 5 ppm
- DIBt certification



Model	Volume flow		Connection Zoll	Output Zoll	Max. Oil absorption Liter	Weight kg	Dimensions			Art.-No.
	cfm	m³/min					L [mm]	W [mm]	H [mm]	
ROS 2	71	2.00	1x G1/2	G1/2	1,5	4.5	270	240	249	32688
ROS 4,5 LED	159	4.50	1x G1/2	G1/2	4	9.5	400	200	610	34493
ROS 10 LED	353	10.00	2x G1/2	G1	10	17.0	670	260	850	34650
ROS 20 LED	706	20.00	2x G1/2	G1	15	30.0	800	325	1,030	34652
ROS 30 LED	1,059	30.00	2x G1/2	G1	25	43.0	990	400	1,030	34654
ROS 60	2,119	60.00	2x G1/2	G1	50	74	1,160	480	1,040	21587

OPTIONS

ROS 2 - 60	Art.-No.
Condensate test kit	21594
Condensate distributor for up to 3 ROS models (3x G½ inch)	21595
Multi-inlet adapter for up to 3 condensate inlets (3x G½ inch)	21596
Alarm/warner for ROS 4,5 LED - ROS 60	32942

MAINTENANCE PARTS

Service-Kit	Art.-No.
Service-Kit ROS 2	32689 ¹
Service-Kit ROS 4,5/LED	34495 ¹
Service-Kit ROS 10/LED	34651 ¹
Service-Kit ROS 20/LED	34653 ¹
Service-Kit ROS 30/LED	34655 ¹
Service-Kit ROS 60	21593 ¹

¹ **Service kit includes:** pre-filter, green activated carbon element, protective clothing, and disposal bag

COMPRESSED AIR ACCESSORIES

The ROS series oil-water separation systems reliably treat compressed air condensate and separate oil and water in several purification stages. The purified water can then be discharged in accordance with the relevant standards. DIBt certification guarantees tested safety.

LED WARNING

The overflow indicator lights up when the maximum condensate level is reached.

INLET

For condensate from the compressed air system.

TEST KIT

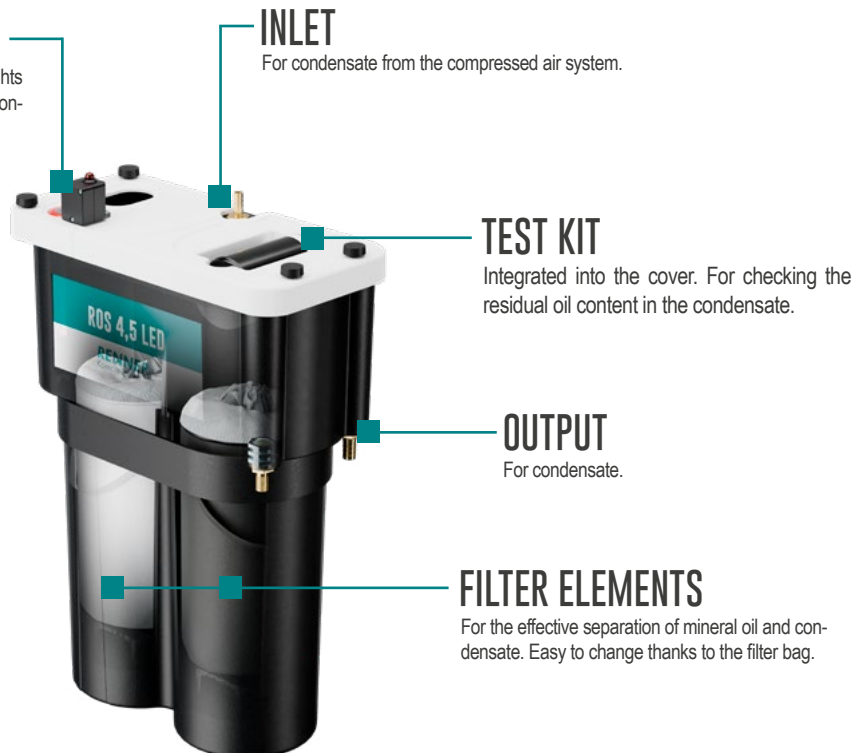
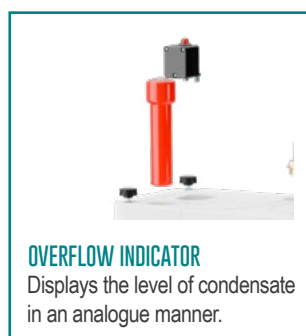
Integrated into the cover. For checking the residual oil content in the condensate.

OUTPUT

For condensate.

FILTER ELEMENTS

For the effective separation of mineral oil and condensate. Easy to change thanks to the filter bag.



CONDENSATE DRAIN UFM-D / UFM-P / RK-1N

COMPRESSED AIR ACCESSORIES

The level-controlled condensate drains remove condensate from compressed air systems fully automatically and without any pressure loss. The control system, based on demand, uses a level sensor to ensure efficient operation. The RK-1N model offers flexible installation options and is available with an optional alarm function.

CONDENSATE INLET

Vertical or horizontal; the UFM-D03 and -D05 models come with a swivelling angle adapter.



UFM-D

POWER CONNECTION

Multi-voltage compatible –
This means it can be used worldwide.

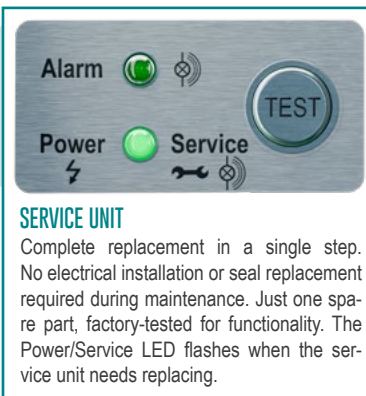
ALARM CONTACT

Potential-free.



HOUSING

Made from corrosion-resistant materials –
Resistant to both oily and oil-free condensate.



SERVICE UNIT

Complete replacement in a single step. No electrical installation or seal replacement required during maintenance. Just one spare part, factory-tested for functionality. The Power/Service LED flashes when the service unit needs replacing.

Model	Volume flow		Connection Zoll	pressure range		Weight kg	Art.-No.
	cfm	m³/min		min. bar	max. bar		
UFM-D03	88	2.50	1x G1/2	0.8	16	0.8	14880 ¹
UFM-D05	177	5.00	1x G1/2	0.8	16	1.0	14881 ²
UFM-D10	353	10.00	3x G1/2	0.8	16	1.6	14882 ²
UFM-D30	1,059	30.00	2x G1/2	0.8	16	2.0	14888 ²
UFM-D130	4,591	130.00	3x G3/4	0.8	16	2.9	14883 ²
UFM-P (pneumatic)	15,892	450.00	1x G1	0.8	16	1.6	01021
UFM-T06VF (level-controlled)	353	10.00	1x G1/2	0.8	16	0.8	13905
RK-1N 10	353	10.00	1x G1/2	0	16	0.5	32871
RK-1N 10 Alarm	353	10.00	1x G1/2	0	16	0.5	34776

¹ with cable and plug for alternating current 230 V / 50 Hz / 1 phase

² with potential-free contact

MAINTENANCE PARTS

Service-Kit	Art.-No.
Service-Kit UFM-D03	05313 ¹
Service-Kit UFM-D05	05655 ¹
Service-Kit UFM-D10	05656 ¹
Service-Kit UFM-D30	14269 ²
Service-Kit UFM-D130	14270 ²
Service-Kit UFM-P	14801 ³
Service kit for condensate drain RK	21743 ⁴
Service-Kit UFM-T06VF	23171 ¹

¹ Service kit includes: service unit, O-ring

² Service kit includes: valve membrane, springs, valve core, seal kit

³ Service kit includes: valve membrane, springs, seal kit

⁴ Service kit includes: Seal kit, spring, valve kit

HOUSING

Made from corrosion-resistant materials – resistant to both oily and oil-free condensate.

CONDENSATE INLET

Can be used vertically or horizontally by changing the locking screw.



RK-1N Alarm

POWER CONNECTION + ALARM

Multi-voltage compatible –
This means it can be used worldwide.

CONTROL UNIT

For manual condensate drainage and to monitor operation.

NOTES

[illegible]

NOTES

[illegible]

[illegible]

COMPRESSED AIR PUSHING YOU FORWARD

RENNER, together with its specialist retail partners, is at your side as a competent sales and service partner in around 100 countries. This guarantees you first-class advice and comprehensive, fast maintenance service worldwide, which solves problems in the shortest possible time if necessary. You receive a product that is specially tailored to your needs and that performs its services in a compact, robust, reliable and energy-efficient manner.



Compressed air treatment - 09/2026

THE RENNER PRODUCT PORTFOLIO

We can supply you with the right compressor for any application – guaranteed.

- SCREW COMPRESSORS
- OIL-FREE COMPRESSORS
- PISTON COMPRESSORS
- CONTROL SYSTEMS
- COMPRESSED AIR ACCESSORIES



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