

KCRK

Constant Air Volume Controller



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Description

KCRK is a circular constant flow control damper. The product is intended for volume control of supply and return air. The product is installed into circular ducts. The product functions independently of pressure and without an external power supply. The operation pressure range is from 50 Pa to 250 Pa for the size 80 and 30 Pa to 250 Pa for all other sizes. The product is intended for all applications, where reliable and cost-effective constant airflow control is required.

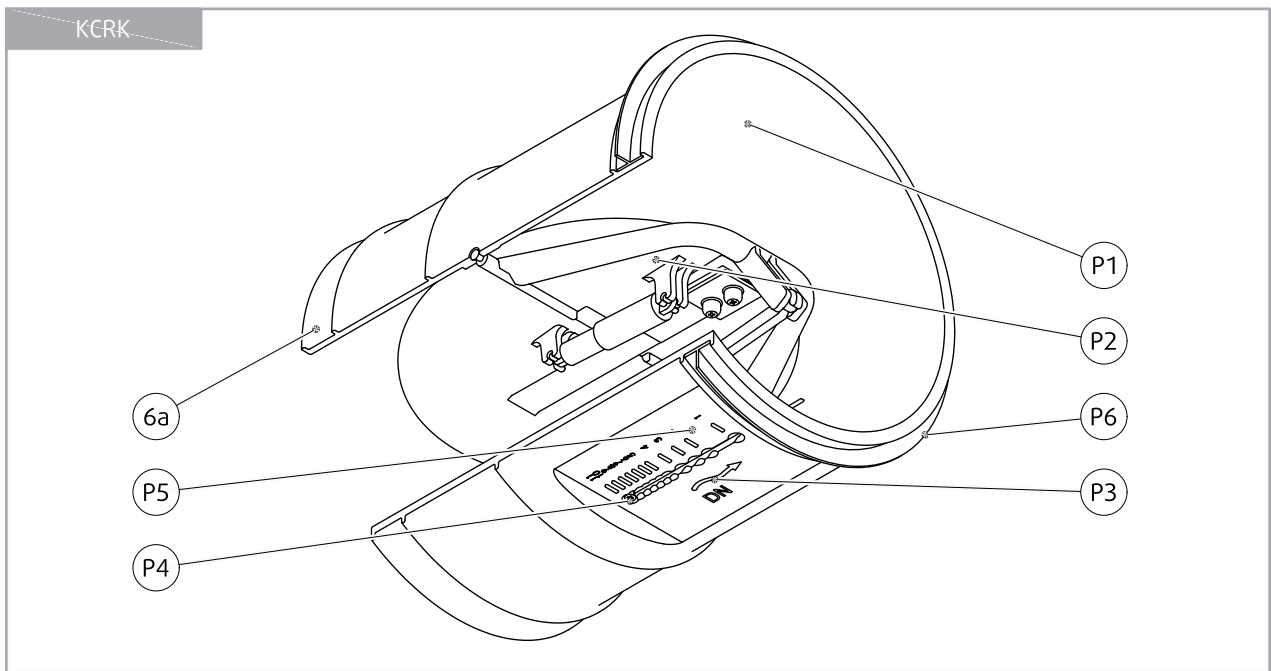
Highlights

- System adjustment or balancing is not necessary.
- Air flow remains constant, regardless of any pressure variations inside the operation range, present in the ductwork.
- Air flow can be adjusted manually, directly on the device.
- Operating at pressures of 50...250 Pa (size 80) and 30...250 Pa (all other sizes)
- Measurement/control accuracy in 10% deviation range

Design

KCRK is manufactured from ABS AF312A-class plastic material. The product consists of a casing, a damper blade, and an adjustment device. The product can be equipped with a single or double rubber gasket. The adjustment device makes it possible to manually re-adjust the factory-set air volume flow on-site.

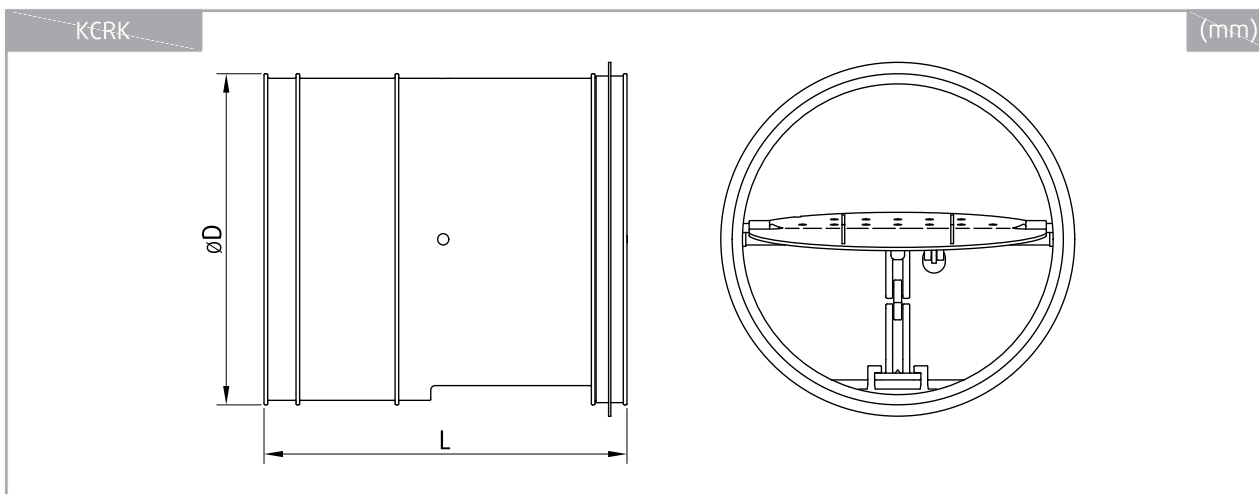
Product Parts



Legend

- 1 Casing
- 2 Damper blade
- 3 Arrow indicating air flow direction
- 4 Air flow setting and fixing screw (Torx T5)
- 5 Adjustment scale
- 6 Rubber gasket
- 6a Second rubber gasket (available only on double-gasket version)

Dimensions & Weights



DN	$\varnothing D$	L	m	V_{min}	V_{max}	ΔP_{min}	ΔP_{max}
	mm		kg	m ³ /h	m ³ /h	Pa	Pa
80	78	94	0,1	22	85	50	250
100	98	113	0,1	36	128	30	250
125	122	145	0,2	50	185	30	250
150	146	160	0,3	70	260	30	250
160	156	171	0,3	90	360	30	250
200	196	201	0,5	115	550	30	250
250	246	242	0,8	185	665	30	250

Ordering Codes

KCRK-

Number of rubber gaskets

1 (standard)

2

Nominal size \varnothing (mm)

80

100

125

160

200

250

Example of the Ordering Code

KCRK-1-125

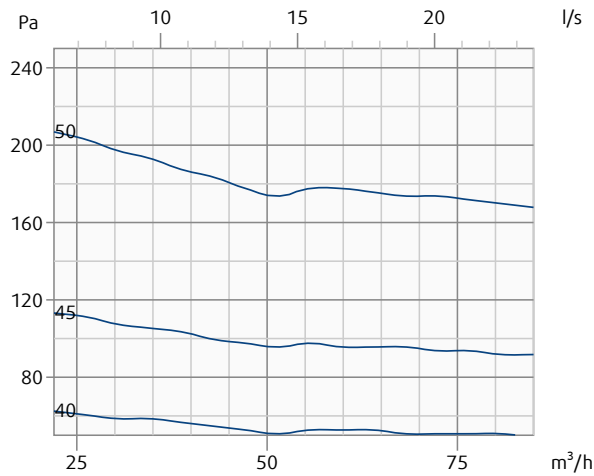
Circular constant flow control damper, size 125, with a single rubber gasket

Technical Parameters

Note: The parameters are identical for the double gasket version

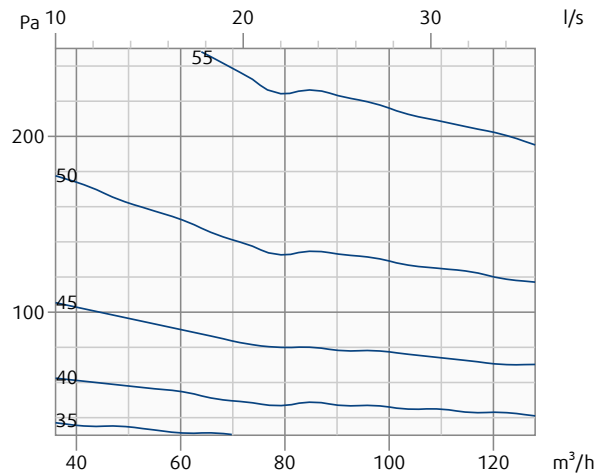
KCRK-1-80

Pressure drop & A-weighted sound power level in dB(A)



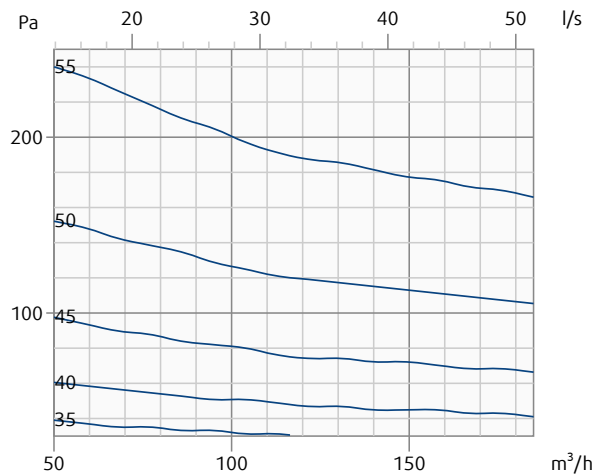
KCRK-1-100

Pressure drop & A-weighted sound power level in dB(A)



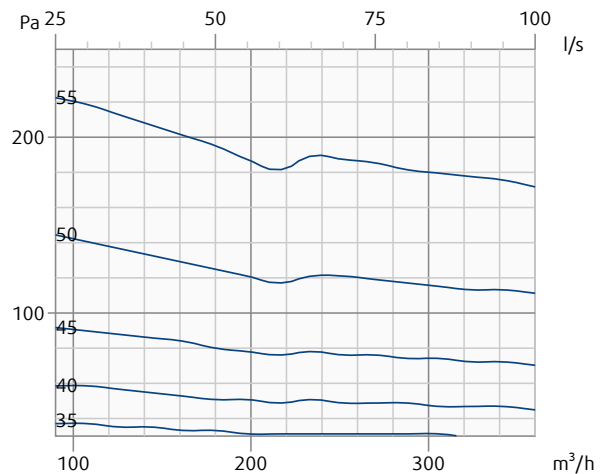
KCRK-1-125

Pressure drop & A-weighted sound power level in dB(A)



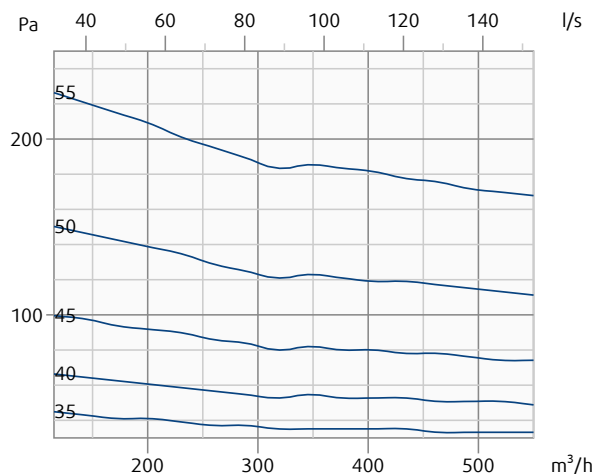
KCRK-1-160

Pressure drop & A-weighted sound power level in dB(A)



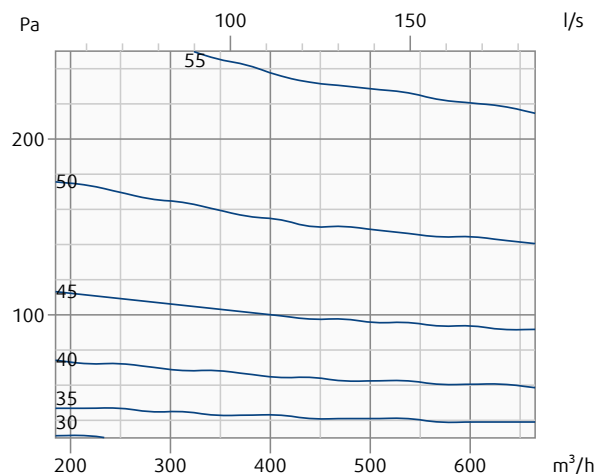
KCRK-1-200

Pressure drop & A-weighted sound power level in dB(A)

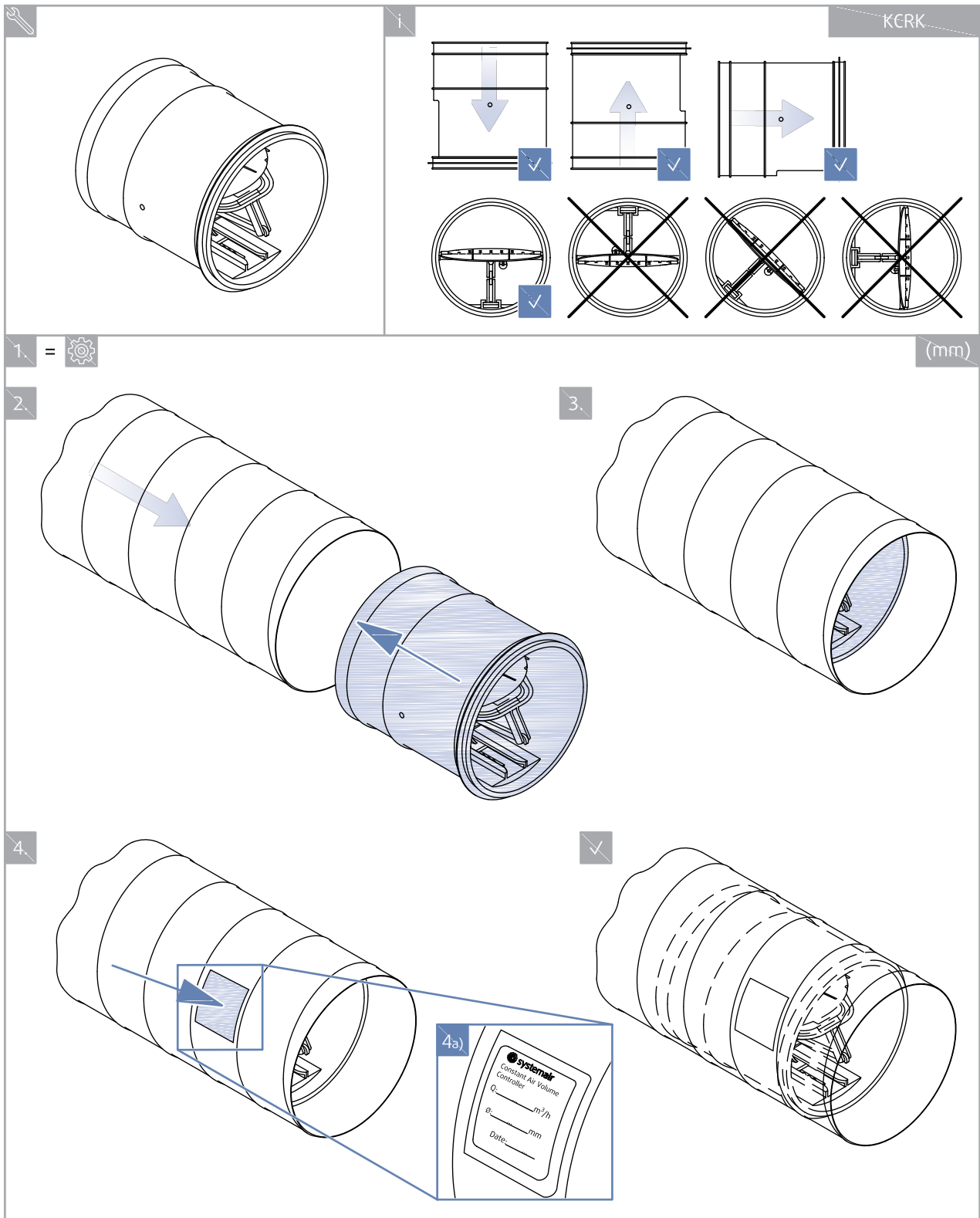


KCRK-1-250

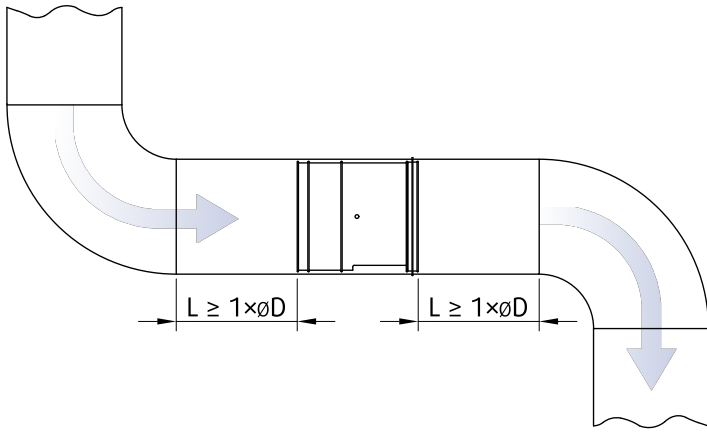
Pressure drop & A-weighted sound power level in dB(A)



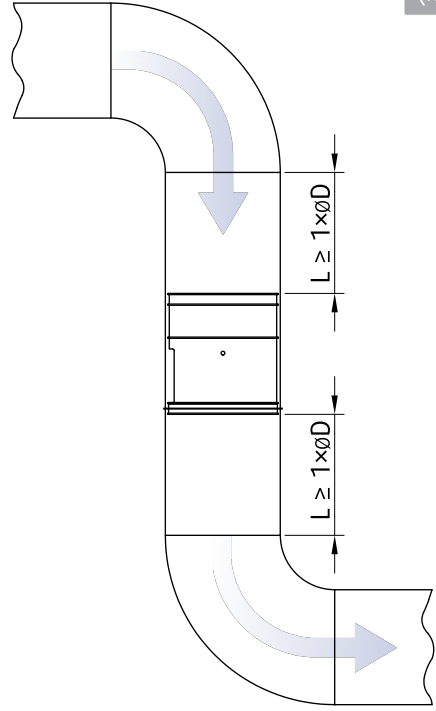
Installation



KCRK

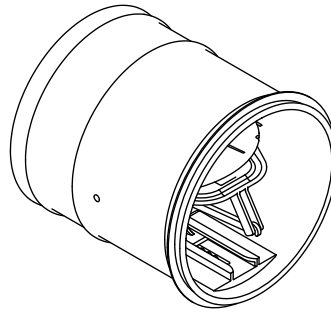


(mm)



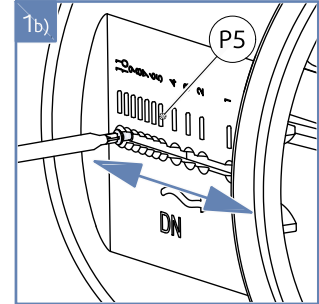
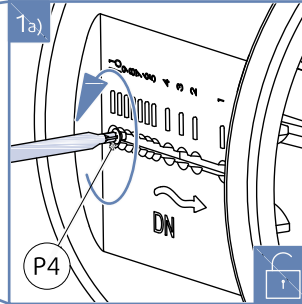
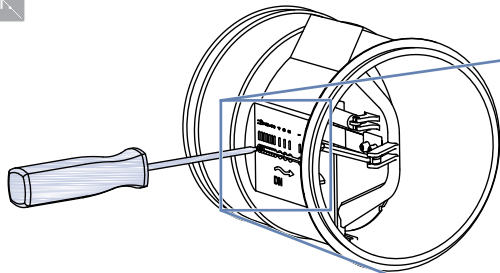
Commissioning

KCRK

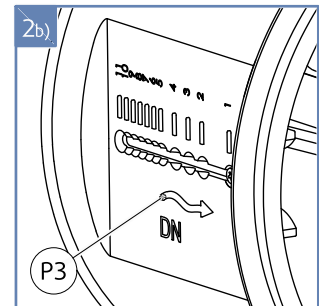
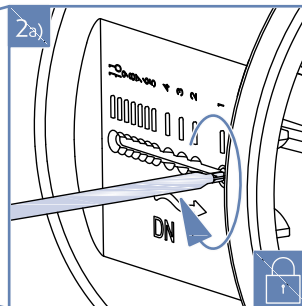
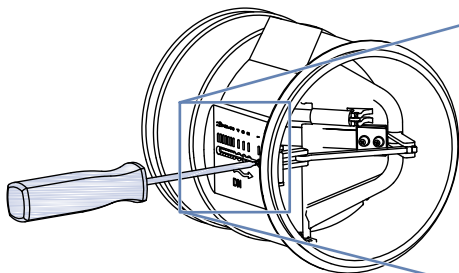


1

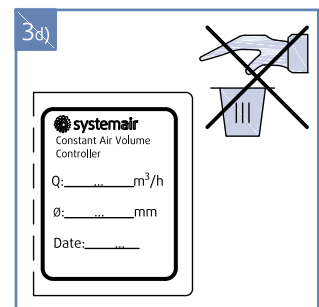
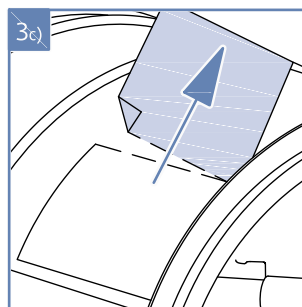
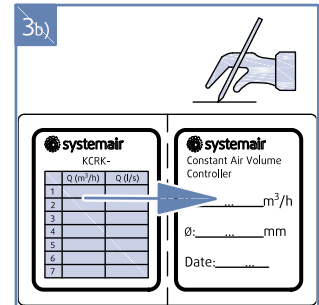
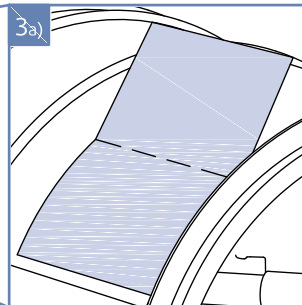
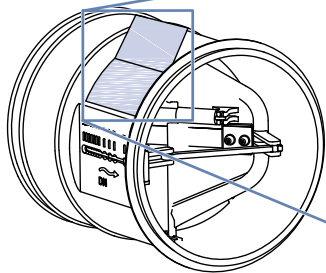
(mm)



2



3



systemair
KCRK-
Constant Air Volume
Controller

	q (m³/h)	q (l/s)
1		
2		
3		
4		
5		
6		
7		

Q: _____ m³/h
 ø: _____ mm
 Date: _____

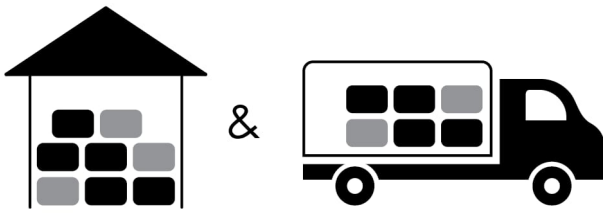
systemair
Constant Air Volume
Controller


Q: _____ m³/h
 ø: _____ mm
 Date: _____


DN	Pos.	Q	Q
		m ³ /h	l/s
80	1	22	6
	2	30	8
	3	37	10
	4	45	13
	5	55	15
	6	70	19
	7	85	24
100	1	36	10
	2	40	11
	3	45	13
	4	58	16
	5	70	19
	6	80	22
	7	105	29
	8	128	36
125	1	50	14
	2	55	15
	3	63	18
	4	75	21
	5	86	24
	6	96	27
	7	115	32
	8	132	37
	9	155	43
	10	185	51
150	1	70	19
	2	80	22
	3	90	25
	4	100	28
	5	125	35
	6	145	40
	7	160	44
	8	180	50
	9	205	57
	10	230	64
	11	260	72

DN	Pos.	Q	Q
		m ³ /h	l/s
160	1	90	25
	2	103	29
	3	118	33
	4	140	39
	5	172	48
	6	192	53
	7	218	61
	8	250	69
	9	280	78
	10	315	88
	11	360	100
200	1	115	32
	2	130	36
	3	148	41
	4	175	49
	5	220	61
	6	275	76
	7	315	88
	8	355	99
	9	395	110
	10	450	125
	11	495	138
	12	550	153
250	1	185	51
	2	205	57
	3	250	69
	4	289	80
	5	336	93
	6	392	109
	7	423	118
	8	466	129
	9	500	139
	10	559	155
	11	600	167
	12	665	185


Transport, Storage and Operation




 °C -40 °C ... +60 °C

 % ≤ 95%



 °C -20 °C ... +60 °C

 % ≤ 95%

Supplement

Any deviations from the technical specifications contained herein and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters. Current information on all products is available on design.systemair.com.



Handbook_KCRK_en-GB
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