

# ISO 21287, Series CCL-IC

## R480668919

General series information  
AVENTICS Series CCL-IC Standard cylinders  
(ISO 21287)

- The AVENTICS Series CCL-IC (ISO 21287) cylinders with their compact and clean design can be used in a wide range of applications. Their smooth surface together with their materials, such as anodized aluminium, stainless steel, and NSF-H1 lubricants, make the cylinder ideal for the demanding requirements in the food and beverage industry.



### Technical data

Industry	Industrial
Standards	ISO 21287
Piston Ø	50 mm
Stroke	20 mm
Ports	G 1/8
Functional principle	Single-acting, retracted without pressure
Cushioning	Elastic cushioning
Magnetic piston	Piston with magnet
Environmental requirements	Industry standard suitable for use in food processing High corrosion
Piston rod	single
Scraper	Standard Industry Scraper
Pressure for determining piston forces	6,3 bar
Retracting piston force	82 N

Extracting piston force	1155 N
Min. ambient temperature	-20 °C
Max. ambient temperature	80 °C
Working pressure min.	1 bar
Working pressure max	10 bar
Piston rod thread	M12x1,5
Spring force max.	82 N
Impact energy	0.64 J
Weight 0 mm stroke	0.602 kg
Weight +10 mm stroke	0.055 kg
Stroke max.	25 mm
Medium	Compressed air
Min. medium temperature	-20 °C
Max. medium temperature	80 °C
Max. particle size	50 µm
Oil content of compressed air min.	0 mg/m <sup>3</sup>
Oil content of compressed air max.	5 mg/m <sup>3</sup>

## Material

Piston rod	Stainless Steel
Scraper material	Polyurethane
Material, front cover	Aluminum
Cylinder tube	Aluminum
End cover	Aluminum
Part No.	R480668919

## Technical information

Further options can be generated in the Internet configurator.

LW\*/SW\* Hexagonal key required

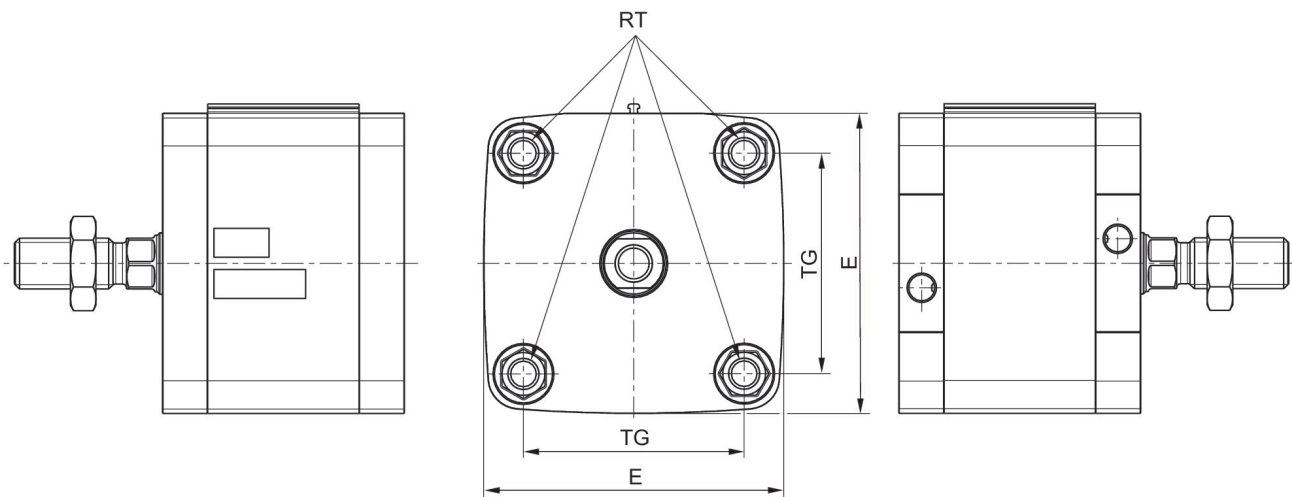
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

## Dimensions

### Ø16 - 63



### Ø80 - 100



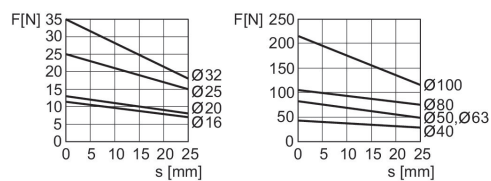
S = stroke

Piston Ø	A	B1	BG min.	E	EE	H	KK	KV	KW
16	12	3.8	15	29	M5	3.1	M6	10	3.2
20	16	3.8	15	36.5	M5	3.1	M8	13	4
25	16	3.8	15	40.5	M5	3.1	M8	13	4
32	19	3.8	16	49.5	G1/8	3.1	M10x1.25	17	5
40	19	3.8	16	57.5	G1/8	3.1	M10x1.25	17	5
50	22	3.8	16	69.5	G1/8	3.1	M12x1.25	18	6
63	22	3.8	16	79.5	G1/8	3.1	M12x1.25	18	6

Piston Ø	LA	LA1	LW	LW*	MM f8	PL	RR min.	RT	SW
16	3.5	3.5	3.2	3.2	8	5	3.2	M4	7
20	4.8	4.6	3.7	3.7	10	5	4.1	M5	8
25	4.8	4.6	3.7	3.7	10	5	4.1	M5	8
32	4.8	4.8	5	5*	12	7.5	5.1	M6	10
40	4.8	4.8	5	5*	12	7.5	5.1	M6	10
50	4.8	4.8	5.7	4,8*	16	7.5	6.4	M8	13
63	4.8	4.8	5.7	4,8*	16	7.5	6.4	M8	13

Piston Ø	SW*	TG	WH	ZA +S	ZB+S
16	7	18 ±0,4	4,8 ±1,4	36	40.8
20	8	22 ±0,4	6 ±1,4	37	43
25	8	26 ±0,4	6 ±1,4	39	45
32	10*	32,5 ±0,5	7 ±1,6	44	51
40	10*	38 ±0,5	7 ±1,6	45	52
50	13*	46,5 ±0,6	8 ±1,6	45.5	53.5
63	13*	56,5 ±0,7	8 ±1,6	49	57

## Extracting piston force



F = spring return force, s = return stroke

## Overview drawing



NOTE: This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.