



**CA2-Z series**  
**Air cylinder**

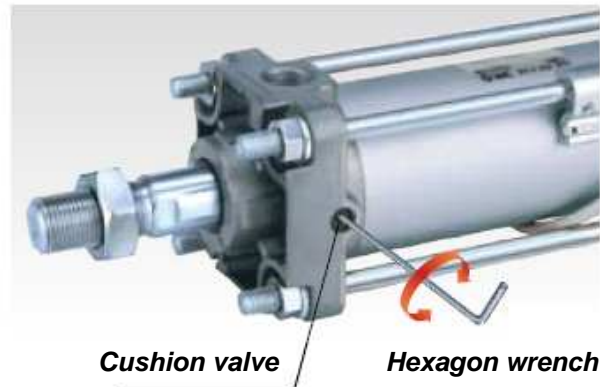
## Improved features and related benefits

**FEATURE:** Weight reduced by up to 15% thanks to a new shape of the rod and head covers.

**CUSTOMER BENEFIT:** Contribution to a reduced overall weight.

**FEATURE:** Improved adjusting of the air cushion: the number of turns of the cushion valve is increased from 1 to 3 (to 1,5 turns in bore 40).

**CUSTOMER BENEFIT:** Labour cost savings for setting / adjusting the cylinder speed and improved performance.



# Technical details

## ■ Cylinder variation

CA2-Z Option	Availability
Standard	●
Non-rotating rod	x
Double rod	●
With rod boot	●
Iron tube	○
Air-hydro	●
Clean series	x
Copper-free	●
Water resistant	○
Smooth type	○
Secondary battery spec.	○

- Released in June'12
- Released in April'13
- x Not released as CA2-Z yet

✓ **XC6 in the old CA2 is now available as XC68 in CA2-Z**

✓ **Low friction in old CA2 (option Q) is consolidated into smooth type CA2-Z (CA2Y)**

✓ **XC3 options have been reduced to: XC3AB, XC3BC, XC3CD, XC3DA**

✓ **CA2-Z is copper free as standard (no need for 20-)**

CA2-Z Option	Availability
XA	●
XB5	x
XB6	○
XC3	●
XC4	○
XC5	○
XC68	○
XC7	●
XC8	●
XC9	○
XC10	○
XC11	○
XC12	○
XC13	○
XC14	●
XC15	●
XC22	○
XC27	○
XC28	○
XC29	○
XC30	●
XC35	○
XC58	○
XC59	○
XC65	○
XC85 <i>New</i>	○
XC88 <i>New</i>	○
XC89 <i>New</i>	○
X1184	○
X2163 <i>New</i>	○

# Technical details

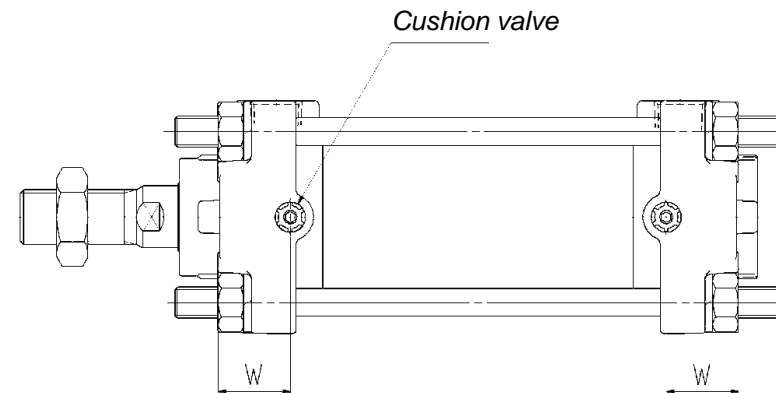
## Product weight

Zero stroke weight (Kg)

Bore size	Old CA2	CA2-Z
40	0,86	0,73
50	1,29	1,06
63	1,84	1,53
80	3,10	2,73
100	4,18	3,71

## Location and adjustment of air cushion valve

Bore size	W [mm]		Adjustment	
	Old CA2	CA2-Z	Old CA2	CA2-Z
40	17,2	18,6	1 turn	1,5 turns
50	19,5	18,6		3 turns
63	19	23,1		
80	25,7	28,6		
100	28,7	28,6		



## Seal kit

Bore size	Old CA2	CA2-Z
40	MB40-PS	CA2-40Z-PS
50	MB50-PS	CA2-50Z-PS
63	MB63-PS	CA2-63Z-PS
80	MB80-PS	CA2-80Z-PS
100	MB100-PS	CA2-100Z-PS

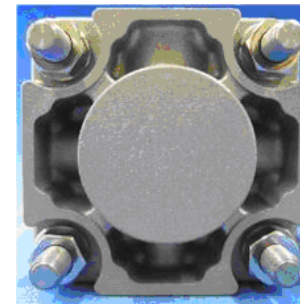
# Technical details

## ■ Tightning torque for tie rod nut (N\*m)

Bore size	Old CA2	CA2-Z
40	10,8	7,4
50	10,8	7,4
63	24,5	20,0
80	34,2	29,0
100	34,2	29,0

## ■ Outline shape and external colour

- ✓ Rod and head covers are changed in shape and surface treatment, but without affecting mounting interchangeability.
- ✓ SMC trademark is added to the head cover



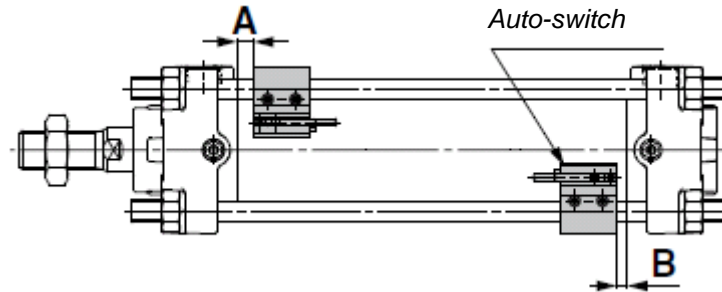
Old CA2



CA2-Z

# Technical details

- Auto-switch proper mounting location (except low friction and air-hydro)



  Different dimensions

Series	Bore Size	D-A9#		D-M9#		D-Z7# D-Z80 D-Y59# D-Y69# D-Y7# D-B59W		D-P3DW		D-P4DW		D-F5# D-J5# D-F59F D-F5#W D-J59W D-F5BAL		D-A59W		D-F5NTL		D-A5# D-A6# D-G39# D-K39# D-A3# D-A44#		D-G5# D-K59 D-G5NTL D-G5#W D-K59W D-G5BAL D-G59F		D-B5# D-B64	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Old CA2	40	6	4	10	8	4	1	6	3	3,5	0,5	7	4	4,5	1,5	12	9	0,5	0	2,5	0	1	0
	50	6	4	10	8	3,5	1,5	5,5	3,5	3	1	6,5	4,5	4	2	11,5	9,5	0	0	2	0	0,5	0
	63	8,5	7,5	12,5	11,5	6	5	3	1,5	5,5	4,5	9	8	6,5	5,5	14	13	2,5	1,5	4,5	3,5	3	2
	80	12	10	16	14	9,5	7,5	6	4,5	9	7	12,5	10,5	10	8	17,5	15,5	6	4	8	6	6,5	4,5
	100	13,5	12,5	17,5	16,5	11	10	8	6,5	10,5	9,5	14	13	11,5	10,5	19	18	7,6	6,5	9,5	8,5	8	7
CA2-Z	40	5	5	9	9	2,5	2,5	4,5	4,5	2	2	5,5	5,5	3	3	10,5	10,5	0	0	1	0	0	0
	50	5,5	4,5	9,5	8,5	3	2	5	4	2,5	1,5	6	5	3,5	2,5	11	10	0	0	1,5	0	0	0
	63	8,5	7,5	12,5	11,5	6	5	3	2,5	5,5	4,5	9	8	6,5	5,5	14	13	2,5	1,5	4,5	3,5	3	2
	80	12,5	9,5	16,5	13,5	10	7	7,5	4	9,5	6,5	13	10	10,5	7,5	18	15	6,5	6,5	8,5	5,5	7	4
	100	14	12	18	16	12	9,5	9	6,5	11	9	14,5	12,5	12	10	19,5	17,5	8	8	10	8	8,5	6,5