



## MGP-Z series Compact guide cylinder

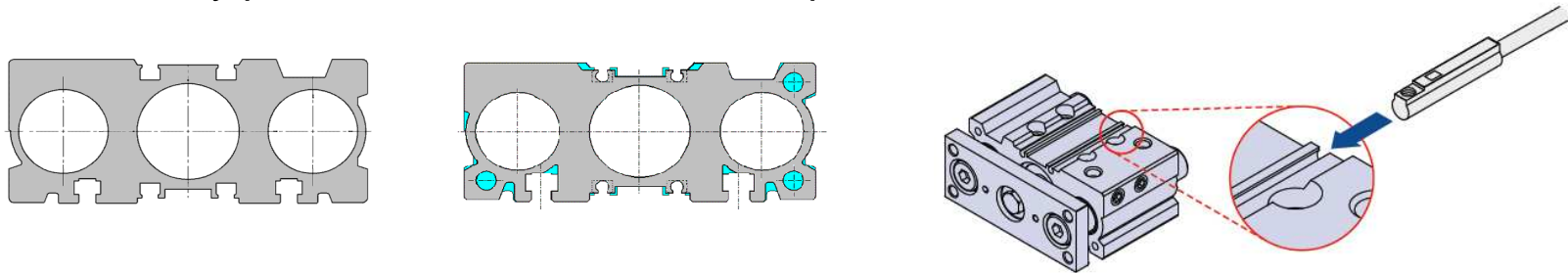
## Improved features and related benefits

**FEATURE:** Weight reduction of up to 17% with a new design of the cylinder body, guide rods, front plate, piston rod, collar and head cover.

**CUSTOMER BENEFIT:** Cost reduction due to the downsizing of moving parts.

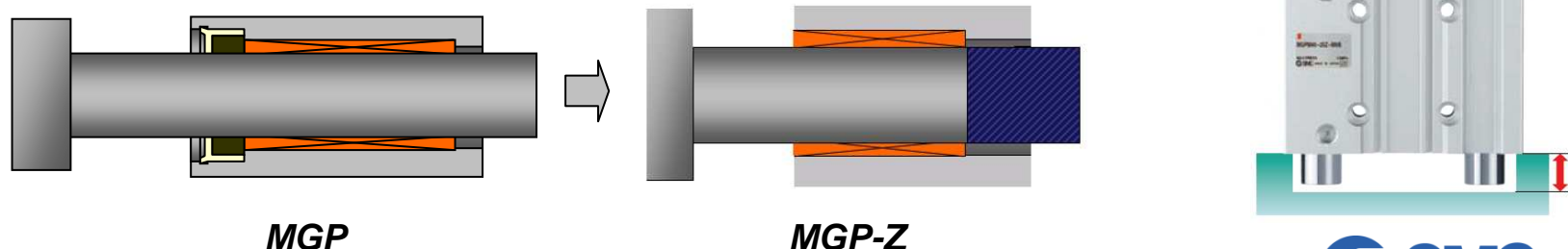
**FEATURE:** The four auto-switch mounting grooves are changed from square type to round type for auto-switch direct mounting.

**CUSTOMER BENEFIT:** Reduced labour cost for assembly and maintenance and less inventory parts since no brackets are required.



**FEATURE:** Guide rod protrusion is shortened maintaining the same strength and load performance (unused guide rod length and felts are eliminated)

**CUSTOMER BENEFIT:** Space saving with same performance



MGP

MGP-Z

# Technical details

## ■ Now

Model		Description
MGP	Rc	Basic type (Rc port)
	NPT	Basic type (NPT port)
	G	Basic type (G port)
MGPA		High precision ball bearing
MGP-*A		With air cushion
MGP*R/V		Water resistance improved type
20-		Copper and Fluorine-free <small>note 1)</small>
25A-		Copper and Zinc free
XA*		Special rod end
XB6		Heat resistant type
XB10		Intermediate stroke (exclusive body)
XB13		Low speed type
XC4		With heavy duty scraper
XC6		Made of stainless steel
XC8		Extension adjustable type
XC9		Retraction adjustable type
XC19		Air cushion, Intermediate stroke (spacer)
XC22		Fluorine rubber seals
XC35		With coil scraper
XC79		With tapped and drilled holes
XC82		Bottom mounting style
XC85		Grease for food processing equipment
X144		Symmetrical port position
X867		Lateral piping type

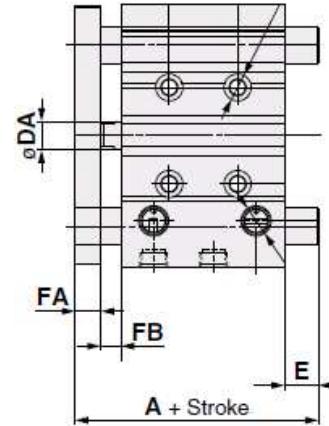
## ■ Coming soon

Model	Description
MGP-R/H	With end lock
MLGP	With lock
12-,13-	Clean series
XB22	With shock absorber
XC92	Dust proof type
XC98	With felt

*Note 1) MGPL-Z and MGPA-Z are already copper and fluorine-free, so it's not possible to order 20-MGPL-Z or 20-MGPA-Z.*

# Technical details

## Dimensional changes



size [mm]	DA	
	MGP	MGP-Z
12	6	6
16	8	8
20	10	10
25	12	10
32	16	14
40	16	14
50	20	18
63	20	18
80	25	22
100	30	26

Different dimensions between MGP and MGP-Z

Bore [mm]	MGPM									MGPM-Z										
	A				E				FA	FB	A				E				FA	FB
	s ≤ 50	50 < s ≤ 100	100 < s ≤ 200	s > 200	s ≤ 50	50 < s ≤ 100	100 < s ≤ 200	s > 200			s ≤ 50	50 < s ≤ 100	100 < s ≤ 200	s > 200	s ≤ 50	50 < s ≤ 100	100 < s ≤ 200	s > 200		
12	42	60,5	85	85	0	18,5	43	43	8	5	42	60,5	82,5	82,5	0	18,5	40,5	40,5	7	6
16	46	64,5	95	95	0	18,5	49	49	8	5	46	64,5	92,5	92,5	0	18,5	46,5	46,5	7	6
20	53	84,5	84,5	122	0	31,5	31,5	69	10	6	53	77,5	77,5	110	0	24,5	24,5	57	8	8
25	53,5	85	85	122	0	31,5	31,5	68,5	10	6	53,5	77,5	77,5	109,5	0	24	24	56	9	7
32	97	102	140	140	37,5	42,5	80,5	80,5	12	10	75	93,5	129,5	129,5	15,5	34	70	70	10	12
40	97	102	140	140	31	36	74	74	12	10	75	93,5	129,5	129,5	9	27,5	63,5	63,5	10	12
50	106,5	118	161	161	34,5	46	89	89	16	12	88,5	109,5	150,5	150,5	16,5	37,5	78,5	78,5	12	16
63	106,5	118	161	161	29,5	41	84	84	16	12	88,5	109,5	150,5	150,5	11,5	32,5	73,5	73,5	12	16
80	115	142	193	193	18,5	45,5	96,5	96,5	22	18	104,5	131,5	180,5	180,5	8	35	84	84	16	24
100	137	162	203	203	21	46	87	87	25	25	126,5	151,5	190,5	190,5	10,5	35,5	74,5	74,5	19	31

Bore [mm]	MGPL / MGPA									MGPL-Z / MGPA-Z										
	A				E				FA	FB	A				E				FA	FB
	s ≤ 30	30 < s ≤ 100	100 < s ≤ 200	s > 200	s ≤ 30	30 < s ≤ 100	100 < s ≤ 200	s > 200			s ≤ 30	30 < s ≤ 100	100 < s ≤ 200	s > 200	s ≤ 30	30 < s ≤ 100	100 < s ≤ 200	s > 200		
12	43	55	85	85	1	13	43	43	8	5	43	55	84,5	84,5	1	13	42,5	42,5	7	6
16	49	65	95	95	3	19	49	49	8	5	49	65	94,5	94,5	3	19	48,5	48,5	7	6
20	63	80	104	122	10	27	51	69	10	6	59	76	100	117,5	6	23	47	64,5	8	8
25	69,5	85,5	104,5	122	16	32	51	68,5	10	6	65,5	81,5	100,5	117,5	12	28	47	64	9	7
32	81	98	118	140	21,5	38,5	58,5	80,5	12	10	79,5	96,5	116,5	138,5	20	37	57	79	10	12
40	81	98	118	140	15	32	52	74	12	10	79,5	96,5	116,5	138,5	13,5	30,5	50,5	72,5	10	12
50	93	114	134	161	21	42	62	89	16	12	91,5	112,5	132,5	159,5	19,5	40,5	60,5	87,5	12	16
63	93	114	134	161	16	37	57	84	16	12	91,5	112,5	132,5	159,5	14,5	35,5	55,5	82,5	12	16
80	109,5	130	160	193	13	33,5	63,5	96,5	22	18	104,5	128,5	158,5	191,5	8	32	62	95	16	24
100	121	147	180	203	5	31	64	87	25	25	119,5	145,5	178,5	201,5	3,5	29,5	62,5	85,5	19	31

# Technical details

## ▪Applicable auto-switches

Auto-switch model	MGP		MGP-Z	
	Applicability	Mounting bracket	Applicability	Mounting bracket
D-A9*	Ø12-100	BMG2-012	Ø12-100	-
D-Z7*/Z80	Ø12-100	-	-	-
D-M9*	Ø12-100	BMG2-012	Ø12-100	-
D-Y59*/Y69*	Ø12-100	-	-	-
D-Y7*	Ø12-100	-	-	-
D-P3DW	Ø25-100	BMG5-025S	Ø32-100	BQ6-032S
D-P4DW	Ø40-100	BMG1-040	-	-
D-P5DW	Ø40-100	BMG1-040	-	-

	D-Y7P*	D-M9*
Load current	80 mA or less	40 mA or less

## ▪Seal kits

Bore size [mm]	MGP	MGP-Z
12	MGP12-PS	MGP12-Z-PS
16	MGP16-PS	MGP16-Z-PS
20	MGP20-PS	MGP20-Z-PS
25	MGP25-PS	MGP25-Z-PS
32	MGP32-PS	MGP32-Z-PS
40	MGP40-PS	MGP40-Z-PS
50	MGP50-PS	MGP50-Z-PS
63	MGP63-PS	MGP63-Z-PS
80	MGP80-PS	MGP80-Z-PS
100	MGP100-PS	MGP100-Z-PS