

Cylinder Accessories ▶ Shock absorber

Industrial shock absorber, Series SA1-MA

▶ Cushioning: adjustable ▶ Mounting: Lock nut ▶ Mounting thread: M12x1 - M64x2



00136598

Ambient temperature min./max.
Medium

-20°C / +80°C
Oil

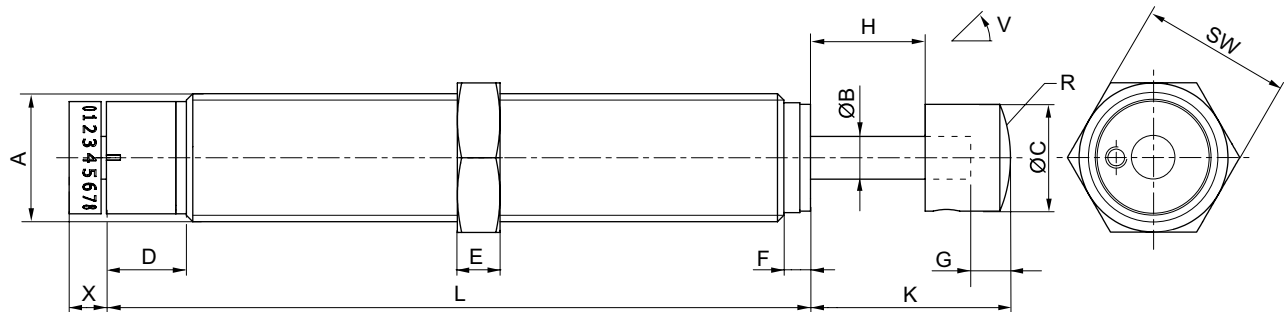
Materials:
Piston rod
sealing for piston rod
Stop

Stainless steel, ground and hardened
Acrylonitrile Butadiene Rubber
Steel, hardened and bronzed

	Mounting thread	Stroke [mm]	Max. energy absorption/stroke	Max. energy absorption/hour	Effective mass me min./max.	Return spring force min./max.	Note	Part No.
			[Nm]	[Nm]	[kg]	[N]		
	M12x1	12	22	35200	9 / 800	2.5 / 7	1); 3)	R412010322
	M14x1,5	14	30	50000	1.6 / 1500	13 / 23	1); 3)	R412010323
	M20x1,5	19	100	76500	9 / 4500	12 / 23	1); 3)	R412010324
	M25x1,5	25	220	105600	22 / 11000	15 / 31	1); 3)	R412010325
	M25x1,5	40	390	175600	38 / 18000	11 / 20	1); 3)	R412010326
	M33x1,5	25	300	120000	60 / 2950	30 / 50	2); 4)	R412010327
	M33x1,5	50	500	150000	100 / 4000	23 / 50	2); 4)	R412010328
	M64x2	100	5000	350000	1000 / 62500	45 / 130	2); 4)	R412010329
	M64x2	150	8000	400000	1250 / 105000	35 / 130	2); 4)	R412010330

- 1) Cylinder tube: Steel, salt bath nitrocarburized
- 2) Cylinder tube: Steel, bronzed
- 3) Lock nut: Steel, salt bath nitrocarburized
- 4) Lock nut: Steel, bronzed

Fig. 1



A = mounting thread
V = tilt

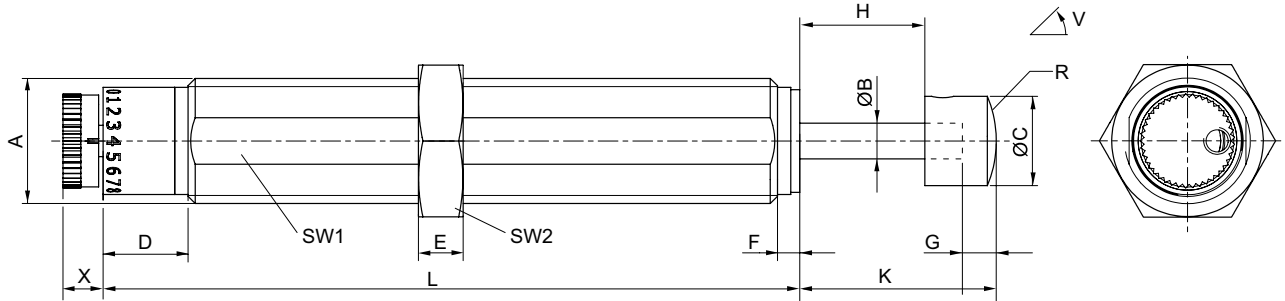
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Part No.	Type	Mounting thread	ØB	ØC	D	E	F	G	H	K	L
R412010322	SA1-MA	M12x1	4	10	7.5	4	2.5	4	12	20	66
Part No.	Type	R	SW	W [°]	X						
R412010322	SA1-MA	13	14	3	3.5						

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Fig. 2



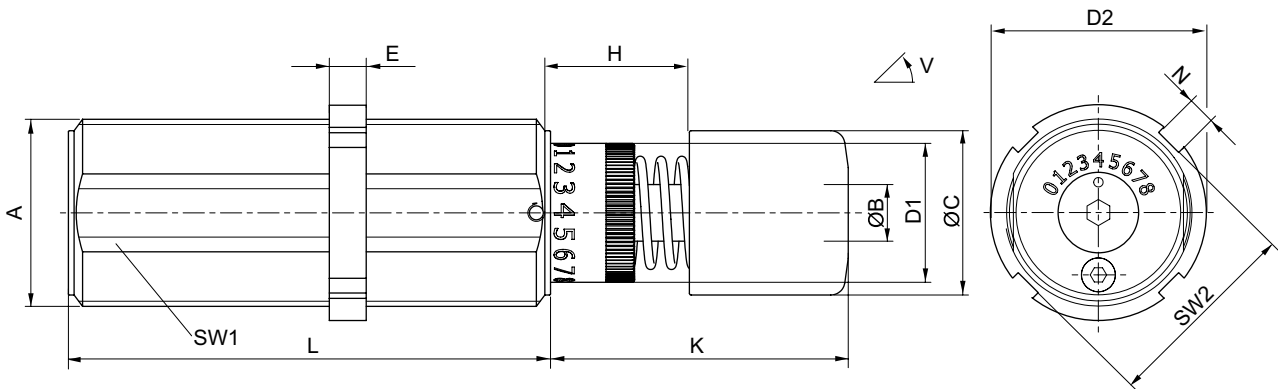
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A = mounting thread
V = tilt

Part No.	Type	Mounting thread	ØB	ØC	D	E	F	G	H	K	L
R412010323	SA1-MA	M14x1,5	4	10	9.5	5	2.5	4	14	22	78
R412010324	SA1-MA	M20x1,5	6	16	10	6	2.5	4	19	29	88
R412010325	SA1-MA	M25x1,5	8	20	9	8	3.5	5	25	38	108
R412010326	SA1-MA	M25x1,5	8	20	9	8	3.5	5	40	53	130

Part No.	Type	R	SW1	SW2	W [°]	X
R412010323	SA1-MA	13	13	17	5	4.5
R412010324	SA1-MA	32.5	18	24	2	5.7
R412010325	SA1-MA	30.3	23	30	2	8.3
R412010326	SA1-MA	30.3	23	30	1	8

Fig. 3



00121349_b

A = mounting thread
V = tilt

Part No.	Type	Mounting thread	ØB	ØC	ØD1	ØD2	E	H	K	L	N
R412010327	SA1-MA	M33x1,5	10	29	24.5	38	6.5	25	53	85	5
R412010328	SA1-MA	M33x1,5	10	29	24.5	38	6.5	50	78	110	5
R412010329	SA1-MA	M64x2	22	59	51	74	10	100	157	179	10
R412010330	SA1-MA	M64x2	22	59	51	74	10	150	207	246	10

Part No.	Type	SW1	SW2	W [°]
R412010327	SA1-MA	30	35	4

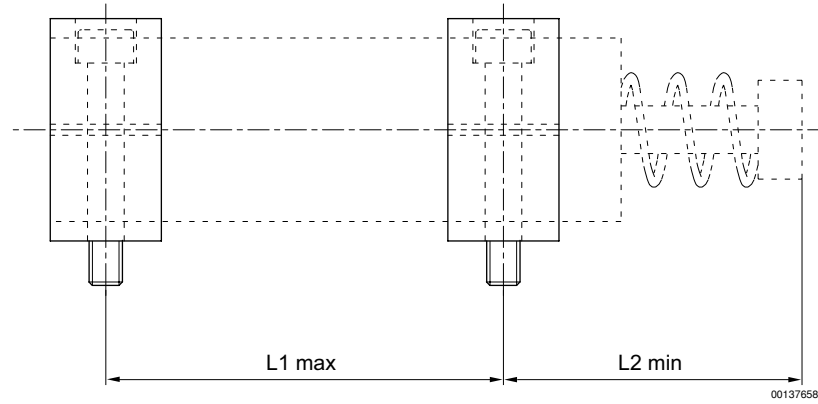
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Part No.	Type	SW1	SW2	W [°]								
R412010328	SA1-MA	30	35	3								
R412010329	SA1-MA	60	71	3								
R412010330	SA1-MA	60	71	2								

Fig. 4 - Positioning the clamping flanges



Part No.	Type	Mounting thread	L1 max	L2 min								
R412010327	SA1-MA	M33x1,5	65	63								
R412010328	SA1-MA	M33x1,5	90	88								
R412010329	SA1-MA	M64x2	154	169,5								
R412010330	SA1-MA	M64x2	221	219,5								

You will find further dimensions on the catalog page for clamping flanges.