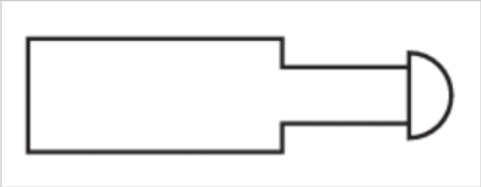
Series SA2

AVENTICS™ Series SA2

EMERSON.

Industrial shock absorber, Series SA2-MS

- for MSC-12-HM, MSC-16-HM MSC-20-HM
- Cushioning self-compensating
- Mounting Lock nut
- Mounting thread M8x1 M12x1
- SA2-MS



Ambient temperature min./max.	-20 ... 80 °C
Medium	Oil
Mounting	Lock nut
Weight	See table below

The delivered product varies from that in the illustration. See the drawing for an exact description.

Technical data

Part No.	for series	Mounting thread	Stroke	Max. energy absorption/stroke
R412010370	MSC-12-HM, MSC-16-HM	M8x1	7 mm	3 Nm
R412010371	MSC-20-HM	M12x1	10 mm	8 Nm

Part No.	Max. energy absorption/hour	Effective mass me	Return spring force
		min./max.	min./max.
R412010370	14100 Nm	1.7 ... 50 kg	2.5 ... 6 N
R412010371	26000 Nm	5 ... 57 kg	3.5 ... 7 N

Part No.	sealing for piston rod	Stop	Weight
R412010370	Polyurethane	Polyoxymethylene	0.015 kg
R412010371	Nitrile butadiene rubber	-	0.035 kg

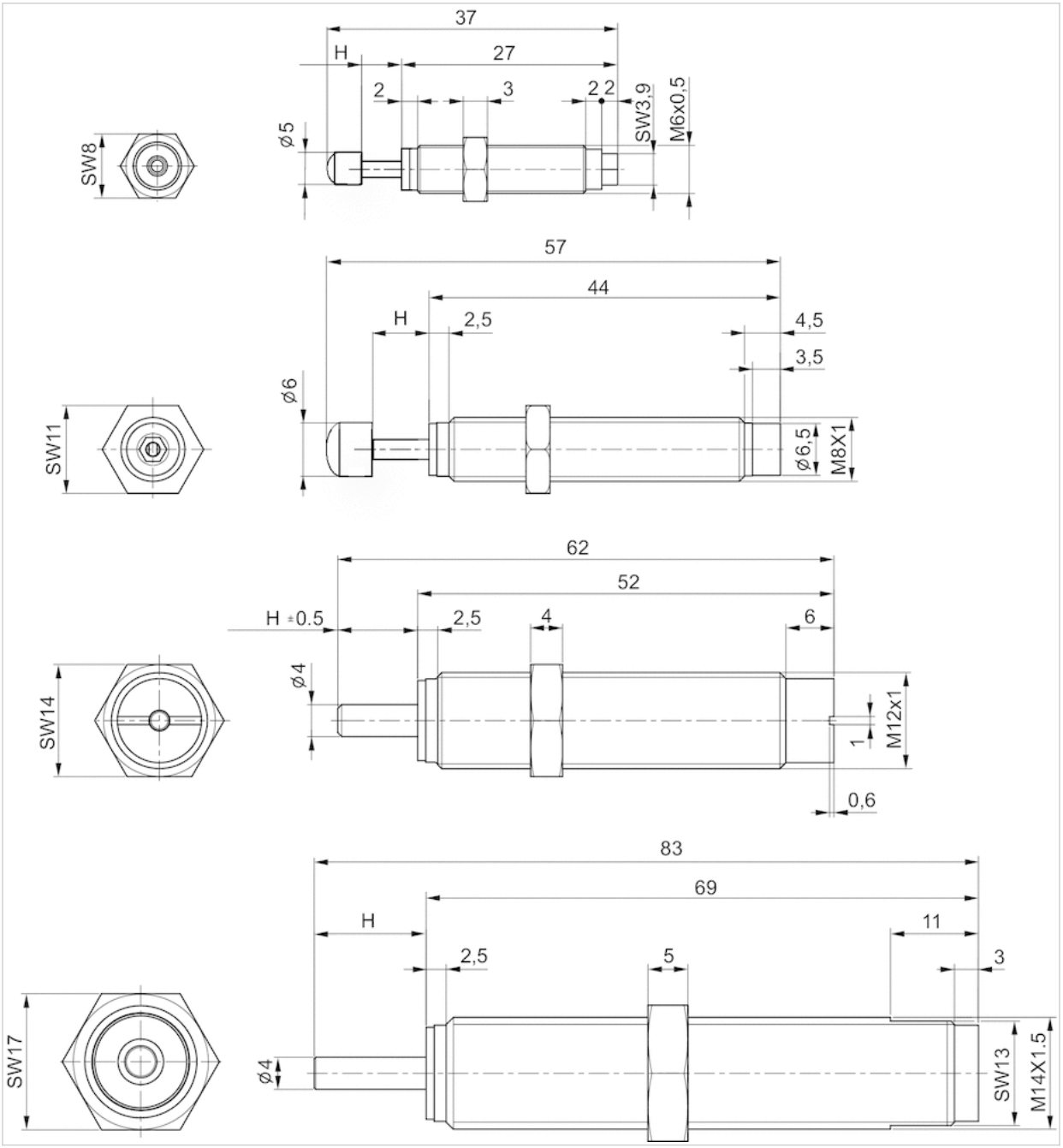
Technical information

Material	
Cylinder tube	Steel, salt bath nitrocarburized
Piston rod	Stainless steel, hardened

Material	
sealing for piston rod	Polyurethane Nitrile butadiene rubber
Mounting ring	Polyoxymethylene

Dimensions

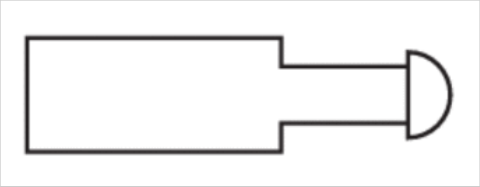
Dimensions



H = stroke

Industrial shock absorber, Series SA2-RT

- for RTC-16 RTC-25,-32,-40 RTC-50,-63
- Cushioning self-compensating
- Mounting Lock nut
- Mounting thread M12x1 M14x1,5 M20x1,5
- SA2-RT



Ambient temperature min./max.	-10 ... 60 °C
Medium	Oil
Impact speed, min./max.	See table below
Mounting	Lock nut
Weight	See table below

Technical data

Part No.	for series	Cushioning hardness	Mounting thread	Stroke	Max. energy absorption/stroke
R412010695	RTC-16	S = soft	M12x1	10 mm	14 Nm
R412010696	RTC-16	M = medium	M12x1	10 mm	14 Nm
R412010697	RTC-16	H = hard	M12x1	10 mm	14 Nm
R412010698	RTC-25,-32,-40	S = soft	M14x1,5	14 mm	30 Nm
R412010699	RTC-25,-32,-40	M = medium	M14x1,5	14 mm	30 Nm
R412010700	RTC-25,-32,-40	H = hard	M14x1,5	14 mm	30 Nm
R412010701	RTC-50,-63	S = soft	M20x1,5	13 mm	65 Nm
R412010702	RTC-50,-63	M = medium	M20x1,5	13 mm	65 Nm
R412010703	RTC-50,-63	H = hard	M20x1,5	13 mm	65 Nm

Part No.	Max. energy absorption/hour	Effective mass me	Return spring force
		min./max.	min./max.
R412010695	30000 Nm	0.5 ... 1.8 kg	3.5 ... 7 N
R412010696	30000 Nm	1.5 ... 7.7 kg	3.5 ... 7 N
R412010697	30000 Nm	5 ... 57 kg	3.5 ... 7 N
R412010698	50000 Nm	3.5 ... 17 kg	13 ... 23 N
R412010699	50000 Nm	9.9 ... 76 kg	13 ... 23 N
R412010700	50000 Nm	62 ... 252 kg	13 ... 23 N
R412010701	52000 Nm	7.5 ... 36 kg	12 ... 23 N

Part No.	Max. energy absorption/hour	Effective mass me	Return spring force
		min./max.	min./max.
R412010702	52000 Nm	20 ... 160 kg	12 ... 23 N
R412010703	52000 Nm	130 ... 610 kg	12 ... 23 N

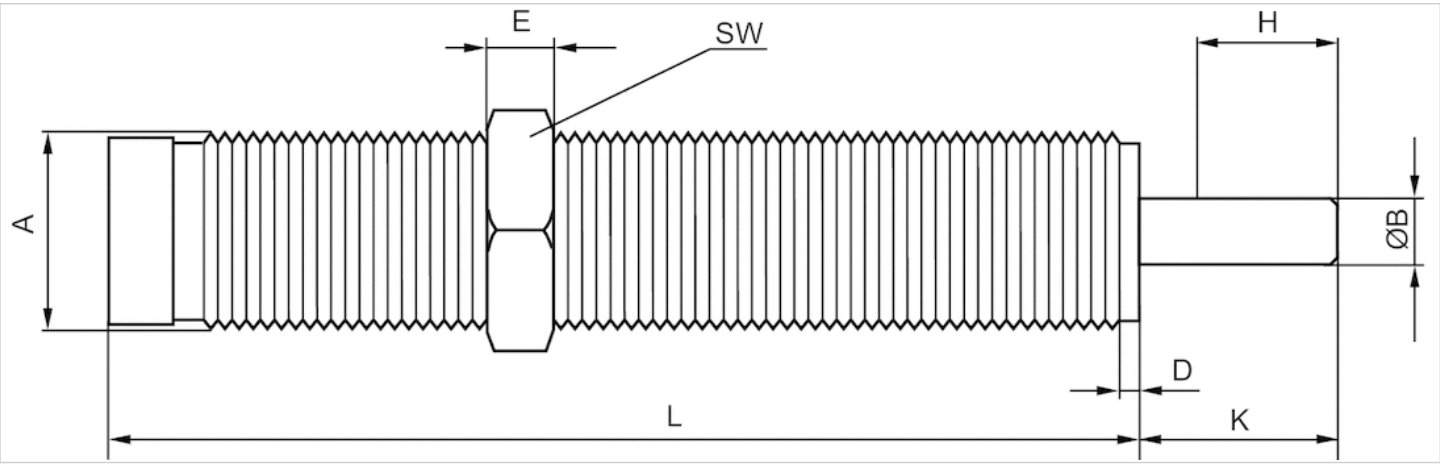
Part No.	impact speed	Weight
	min./max.	
R412010695	3.5 ... 5 m/s	0.04 kg
R412010696	1.9 ... 4.3 m/s	0.04 kg
R412010697	0.7 ... 2.4 m/s	0.04 kg
R412010698	1.9 ... 4.1 m/s	0.05 kg
R412010699	0.9 ... 2.5 m/s	0.05 kg
R412010700	0.5 ... 1 m/s	0.05 kg
R412010701	1.9 ... 4.2 m/s	0.15 kg
R412010702	0.9 ... 2.6 m/s	0.15 kg
R412010703	0.5 ... 1 m/s	0.15 kg

Technical information

Material	
Cylinder tube	Steel, bronzed
Piston rod	Stainless steel, hardened
Lock nut	Steel, bronzed

Dimensions

Dimensions



H = stroke
A = mounting thread

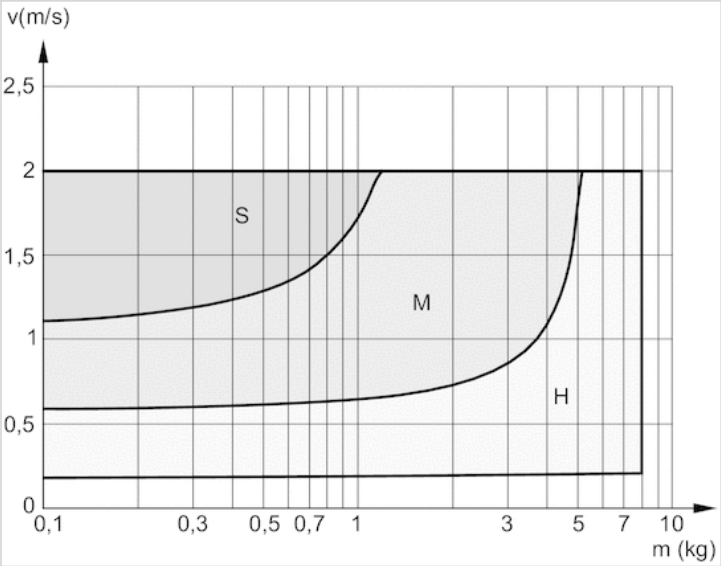
Dimensions

Part No.	Type	Mounting thread	ØB	D	E	H	K	L	SW
R412010695	SA2-RT	M12x1	4	2.5	4	10	15	52	14
R412010696	SA2-RT	M12x1	4	2.5	4	10	15	52	14

Part No.	Type	Mounting thread	ØB	D	E	H	K	L	SW
R412010697	SA2-RT	M12x1	4	2.5	4	10	15	52	14
R412010698	SA2-RT	M14x1,5	4	2.5	5	14	18.5	69	17
R412010699	SA2-RT	M14x1,5	4	2.5	5	14	18.5	69	17
R412010700	SA2-RT	M14x1,5	4	2.5	5	14	18.5	69	17
R412010701	SA2-RT	M20x1,5	6	2.5	6	13	18	75	24
R412010702	SA2-RT	M20x1,5	6	2.5	6	13	18	75	24
R412010703	SA2-RT	M20x1,5	6	2.5	6	13	18	75	24

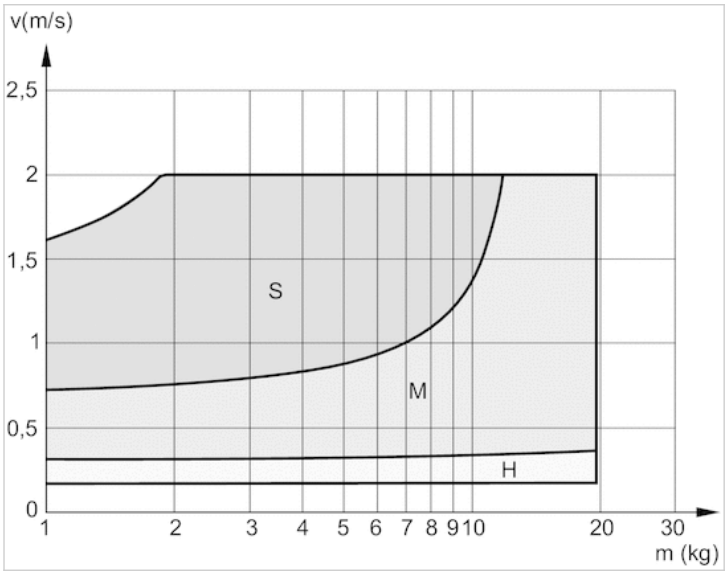
Diagrams

Cushioning diagram, Ø 16 mm



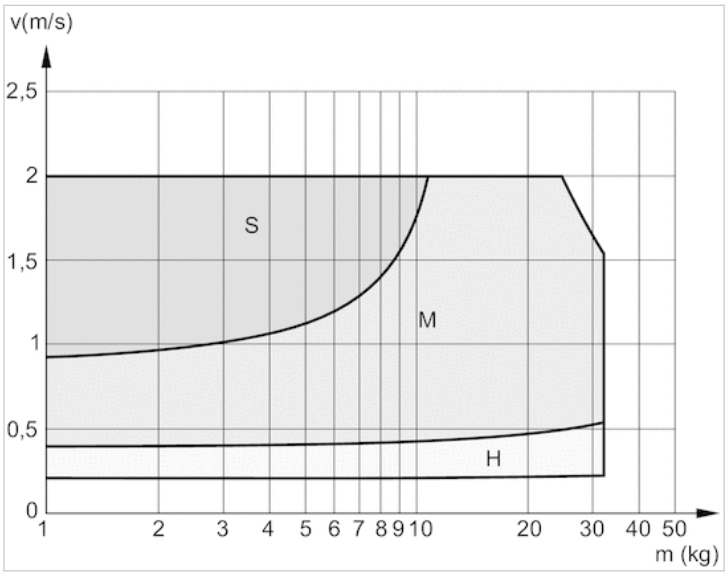
V = velocity [m/s]
M = moving mass
S = soft
M = medium
H = hard

Cushioning diagram, Ø 25 mm



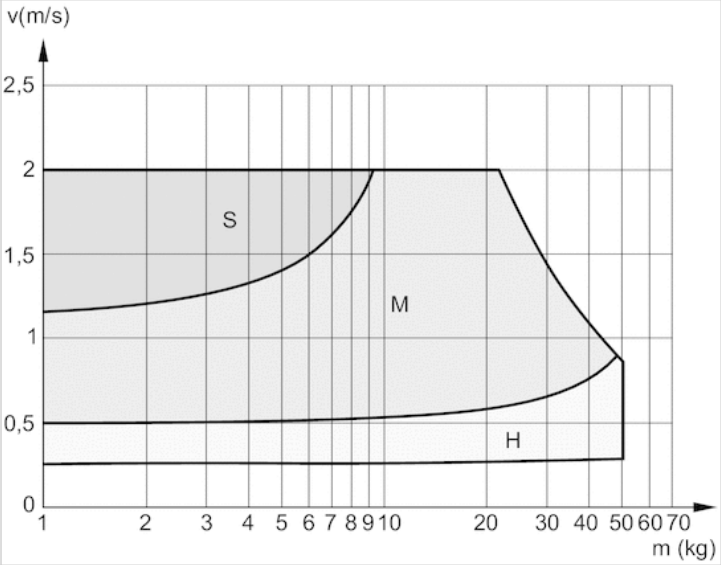
V = velocity [m/s]
M = moving mass
S = soft
M = medium
H = hard

Cushioning diagram, Ø 32 mm



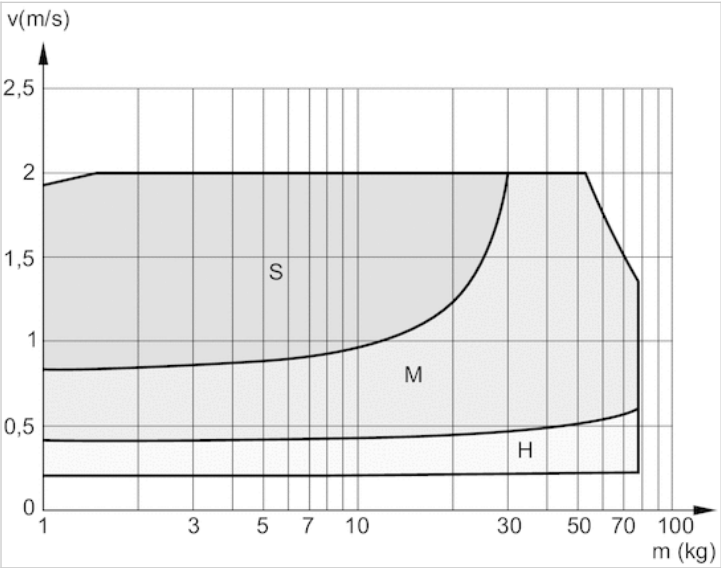
V = velocity [m/s]
M = moving mass
S = soft
M = medium
H = hard

Cushioning diagram, Ø 40 mm



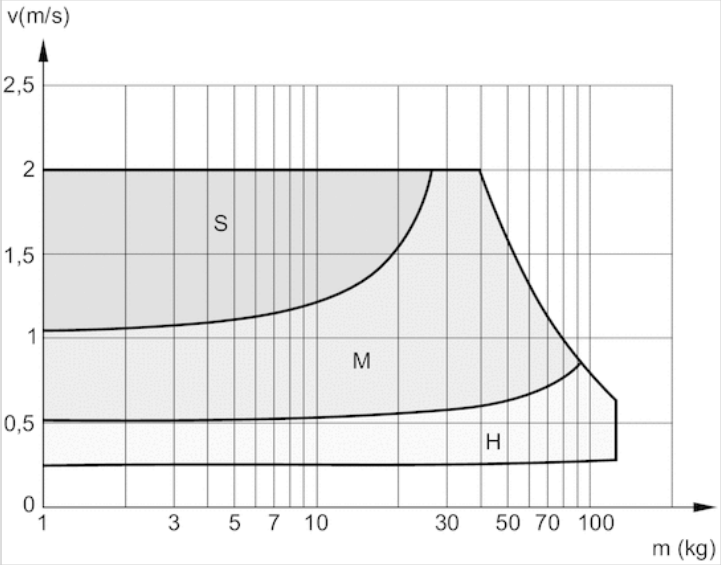
V = velocity [m/s]
M = moving mass
S = soft
M = medium
H = hard

Cushioning diagram, Ø 50 mm



V = velocity [m/s]
M = moving mass
S = soft
M = medium
H = hard

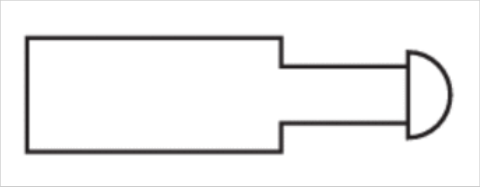
Cushioning diagram, Ø 63 mm



V = velocity [m/s]
M = moving mass
S = soft
M = medium
H = hard

Industrial shock absorber, Series SA2-RC

- for RCM-12 RCM-16 RCM-20 RCM-25
- Cushioning self-compensating
- Mounting Lock nut
- Mounting thread M8x1 M10x1 M12x1 M14x1,5
- SA2-RC



Ambient temperature min./max.	0 ... 60 °C
Medium	Oil
Mounting	Lock nut
Weight	See table below

Technical data

Part No.	for series	Mounting thread	Stroke	Max. energy absorption/stroke	Max. energy absorption/hour
R412004751	RCM-12	M8x1	6 mm	4 Nm	14400 Nm
R412004752	RCM-16	M10x1	6 mm	9 Nm	21000 Nm
R412004753	RCM-20	M12x1	8.5 mm	16 Nm	30000 Nm
R412010089	RCM-25	M14x1,5	9.5 mm	20 Nm	40000 Nm

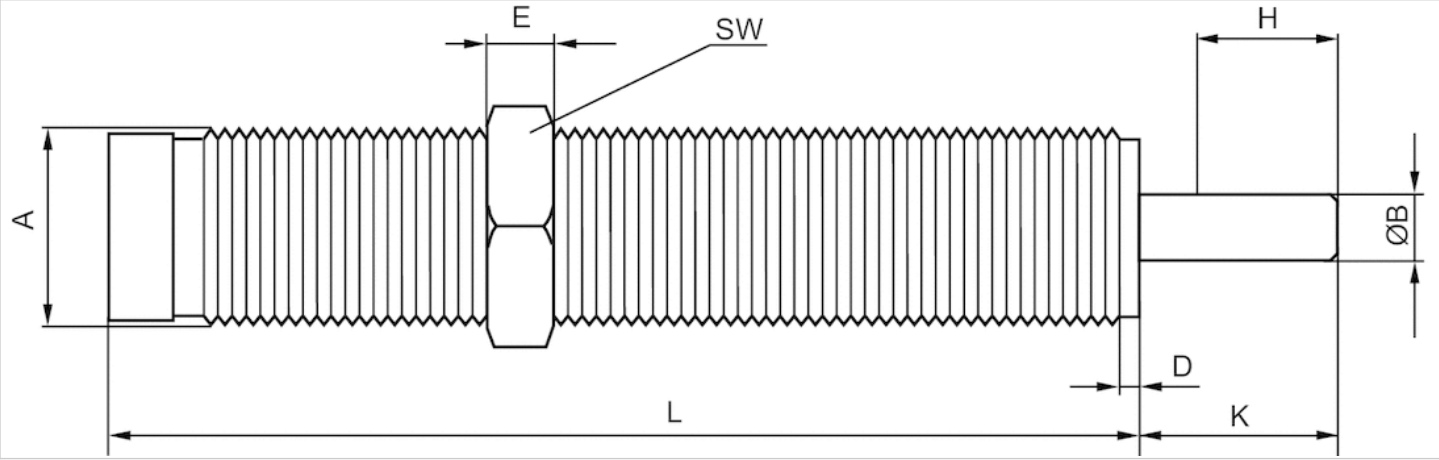
Part No.	Effective mass me	Return spring force	Weight
	min./max.	min./max.	
R412004751	2.8 ... 70 kg	2.5 ... 6 N	0.01 kg
R412004752	6 ... 280 kg	3.5 ... 8 N	0.02 kg
R412004753	17 ... 510 kg	3.5 ... 7 N	0.035 kg
R412010089	100 ... 420 kg	23 ... 35 N	0.06 kg

Technical information

Material	
Cylinder tube	Steel, bronzed
Piston rod	Stainless steel, hardened
Lock nut	Steel, bronzed

Dimensions

Dimensions

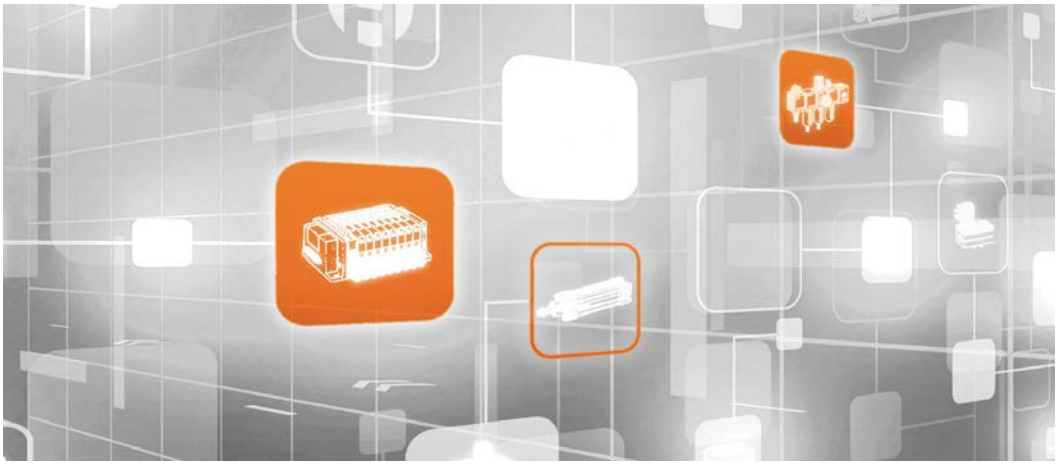


H = stroke
A = mounting thread

Dimensions

Part No.	For series	Mounting thread	ØB	D	E	H	K	L	SW
R412004751	RCM-12	M8x1	2.5	2.5	3	6	9	44	11
R412004752	RCM-16	M10x1	3	2.5	3	6	9	49.5	13
R412004753	RCM-20	M12x1	4	2.5	4	8,5	11	65	14
R412010089	RCM-25	M14x1,5	4	2.5	5	9,5	14	69	17

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: Emerson.com/Aventics

Your local contact: Emerson.com/contactus

Emerson.com

Facebook.com/EmersonAutomationSolutions

LinkedIn.com/company/Emerson-Automation-Solutions

Twitter.com/EMR_Automation

2019-03

EMERSON

CONSIDER IT SOLVED™