



**SHOCK
ABSORBERS**

BRAUER®

Since 1926, Brauer has been providing industry with the finest engineered products, expert technical support, on time deliveries and unparalleled customer service. Our brands are now recognised world-wide as products of the highest quality, and the breadth of our product portfolio provides our demanding customers with tooling solutions for a wide variety of problems.

This comprehensive catalogue details Brauer's new range of innovative shock absorption and speed control products. The Brauer shock absorber range comprises closed hydraulic components which operate on the basis of displacement. All products are available as fixed or adjustable units enabling Brauer to offer a product to solve most shock absorption problems.

Our team of highly talented engineers is backed by the latest computer aided design facilities including three dimensional feature based parametric solid modelling. Manufacturing is carried out in our modern, well equipped factory accredited with ISO 9001 certification and situated in Milton Keynes, some 40 miles north of London.

At Brauer, we continue to be motivated by working with our customers in providing innovative solutions for their particular tooling requirements. These working partnerships, built by many years of unparalleled customer service, will ensure that Brauer branded tooling, and automation products, will remain at the forefront of their markets.

To view the complete tooling portfolio manufactured by the Brauer companies, please consult our web site at www.Brauer.co.uk.

SPECIAL PRODUCTS TO SUIT YOUR PARTICULAR NEEDS



If, after considering our standard range of product, you are unable to find a solution to suit your particular application, then please consult our sales and design engineers who will be only too pleased to consider the design and manufacture of a **bespoke** specially designed item to meet your particular needs.



*For further details of any Brauer Product
contact*

BRAUER®

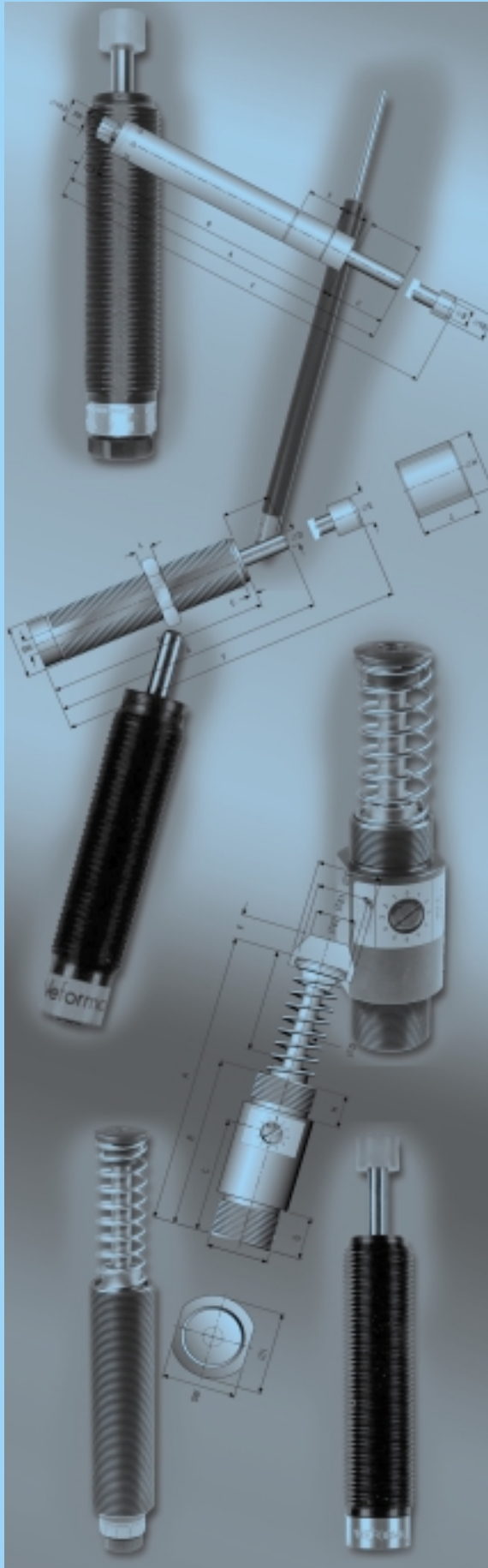
HMC BRAUER LIMITED
DAWSON ROAD, MOUNT FARM, MILTON KEYNES, ENGLAND MK1 1JP

TEL: 01908-374022 FAX: 01908-641628
email: sales@brauer.co.uk Web: www.brauer.co.uk

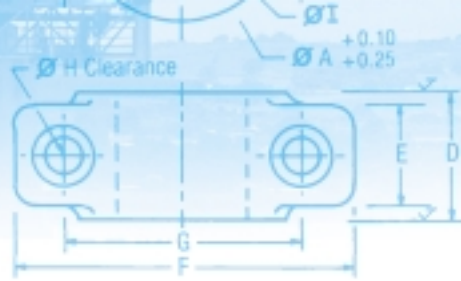
© HMC Brauer Ltd 2001

No part of this publication may be reproduced in any form (including photocopying or storing in any medium by electronic means) without the written permission of HMC Brauer Ltd.

HMC-Brauer Limited reserves the right to change the design or specification of the products shown in this catalogue without prior notification.



Miniature self-compensating WM-M Series	2
Self compensating WM-S Series	3
Adjustable WM-E Series	4 - 6
Self compensating progressive WM-P Series	7
Adjustable hydraulic speed controls WM-V Series	8



Miniature self compensating WM-M SERIES



- integrated end stop
- quick set back of the piston rod by a special integrated return spring
- any kind of mounting position
- housing: black finish

Special threads available in stock:

- WM-M 10 x 5: 3/8-32 UNEF
- WM-M 10 x 6: 3/8-32 UNEF
- WM-M 10 x 6.5: 3/8-32 UNEF
- WM-M 10 x 8: 3/8-32 UNEF
- WM-M 12 x 10: 7/16-28 UNEF

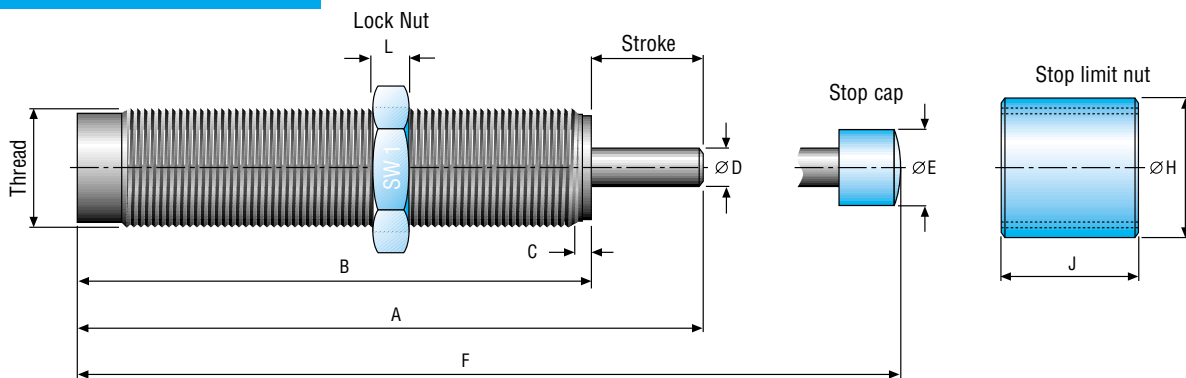
Special versions:

- different threads
- nickel-plated

- piston rod: hardened stainless steel
- temperature range: -20°C ... + 80°C.
- 1 lock nut included
- on request: stop cap to reduce the noise (add "A" after the part no.)

Shock absorbers in stainless steel available in stock:

- WM-M 10 x 5
- WM-M 10 x 6
- WM-M 10 x 6.5
- WM-M 10 x 8
- WM-M 12 x 10



DIMENSIONS

Series	Thread	A	B	C	ØD	ØE	F	ØH	J	L	SW
WM-M 6 x 5-1/2/3	M6 x 0.5	30.0	25.0	2.5	2.0	-	-	10.0	8.0	3.0	8.0
WM-M 8 x 5-1/2/3	M8 x 1	33.0	28.0	3.0	2.5	6.0	39.0	11.0	12.0	3.0	11.0
WM-M 8 x 5-5/6/7	M8 x 0.75	33.0	28.0	3.0	2.5	6.0	39.0	11.0	12.0	3.0	11.0
WM-M 10 x 5-1/2/3	M10 x 1	33.0	28.0	3.5	3.0	6.0	39.5	14.0	15.0	3.0	13.0
WM-M 10 x 6-1/2/3	M10 x 1	35.0	29.0	3.5	3.0	6.0	41.0	14.0	15.0	3.0	13.0
WM-M 10 x 6.5-1/2/3	M10 x 1	44.5	38.5	3.5	3.0	6.0	51.0	14.0	15.0	3.0	13.0
WM-M 10 x 8-1/2/3	M10 x 1	46.0	38.0	3.5	3.0	6.0	52.5	14.0	15.0	3.0	13.0
WM-M 12 x 10-1/2/3	M12 x 1	59.0	49.0	3.5	4.0	10.0	67.0	16.0	20.0	4.0	14.0

PERFORMANCE TABLE

Series	Stroke	Energy absorption	Effective mass						Impact speed	Return spring force		Weight	
			-1 / -5 soft		-2 / -6 medium		-3 / -7 hard			min. N	max. N		
			mm	Nm/stroke	Nm/h	min.kg	max.kg	min.kg					max.kg
WM-M 6 x 5	5.0	1.0	3,000	0.05	1.00	0.80	2.80	1.50	4.00	1.0	2	5	3
WM-M 8 x 5	5.0	1.5	4,000	0.25	3.00	0.70	6.00	3.00	9.00	1.0	2	5	7
WM-M 10 x 5	5.0	1.8	4,000	0.50	5.50	2.00	9.50	8.00	14.00	1.0	2	5	11
WM-M 10 x 6	6.0	2.2	4,400	0.70	5.50	3.00	10.00	8.00	18.00	2.2	3	6	11
WM-M 10 x 6.5	6.5	3.0	22,050	1.00	7.00	3.20	13.00	9.00	22.00	2.2	3	6	14
WM-M 10 x 8	8.0	3.0	24,000	0.90	9.00	2.00	12.00	9.00	23.00	1.0	3	6	14
WM-M 12 x 10	10.0	9.0	27,450	1.00	15.00	10.00	42.00	25.00	61.00	4.2	4	10	30

Self compensating

WM - S SERIES



- integrated end stop
- impact speed:
S 0.1; 0.15; 0.2; 0.25: 0.05 - 4.0 m/s
S 0.35; 0.5; 1.0: 0.5 - 60 m/s
- quick set back of the piston rod by a special integrated return spring
- any kind of mounting position
- housing: black finish

Special threads available in stock:

- WM-S 0.1: M 8 x 0.75
- WM-S 0.15: 3/8-32 UNEF
- WM-S 0.2: 7/16-28 UNEF
- WM-S 0.25: M 14 x 1; M 15 x 1;
1/2-20 UNF; 9/16-18 UNF
- WM-S 0.35: M 16 x 1
- WM-S 0.5: M 20 x 1; M 20 x 1.25;
M 22 x 1; 3/4-16 UNF
- WM-S 1.0: M 24 x 1.25; M 24 x 1.5;
M 25 x 2; M 27 x 1.5;
M 27 x 2; M 26 x 1.5;
1 - 12 UNF
- WM-S 1.0 x 40: M 27 x 1.5; M 27 x 2;
1 - 12 UNF

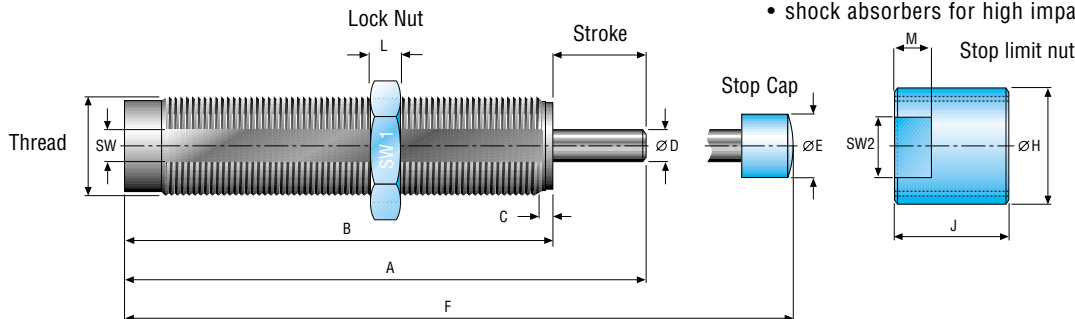
- piston rod: hardened stainless steel
- temperature range: -20°C ... + 90°C.
- 1 lock nut included
- on request:
 - stop cap to reduce the noise (add "A" after the part no.)
 - proximity switches (ask for details)

Shock absorbers in stainless steel available in stock:

- WM-S 0.1
- WM-S 0.2
- WM-S 0.25
- WM-S 0.25
- WM-S 0.35
- WM-S 0.5
- WM-S 1.0-0/1/2/3
- WM-S 1.0-4/5/6/7

Special versions:

- seals/specific oil for high temperatures
- clevis mounting
- nickel-plated
- sea water resistant
- shock absorbers for high impact speed



DIMENSIONS

Series	Thread	A	B	C	∅D	∅E	F	∅H	J	L	SW	SW1	SW2	M
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
WM-S 0.1-1/2/3	M 8 x 1	47.0	41.0	3.0	2.5	6	53.0	11	12	3	-	11	-	-
WM-S 0.15-1/2/3	M 10 x 1	55.0	48.0	3.5	3.0	6	61.5	14	15	3	-	13	-	-
WM-S 0.2-1/2/3	M 12 x 1	62.0	52.0	3.5	4.0	10	70.0	16	20	4	-	14	-	-
WM-S 0.25-0/1/2/3	M 14 x 1.5	79.5	67.0	3.5	4.0	10	87.5	18	20	5	12	17	15	6
WM-S 0.35-0/1/2/3	M 16 x 1.5	90.0	77.0	3.5	6.0	12	100.0	21	25	6	14	19	19	8
WM-S 0.5-0/1/2/3	M 20 x 1.5	104.0	85.0	3.5	6.0	12	114.0	25	35	6	18	24	22	8
WM-S 0.5 x 40-0/1/2/3	M 20 x 1.5	165.0	125.0	3.5	6.0	12	175.0	25	35	6	18	24	22	8
WM-S 1.0-0/1/2/3	M 25 x 1.5	133.0	108.0	3.5	8.0	16	146.0	34	38	8	23	30	30	10
WM-S 1.0-4/5/6/7	M 27 x 3	133.0	108.0	3.5	8.0	16	146.0	34	38	8	23	30	30	10
WM-S 1.0 x 40-0/1/2/3	M 25 x 1.5	170.0	130.0	3.5	8.0	16	183.0	34	38	8	23	30	30	10
WM-S 1.0 x 40-4/5/6/7	M 27 x 3	170.0	130.0	3.5	8.0	16	183.0	34	38	8	23	30	30	10
WM-S 1.0 x 80-0/1/2/3	M 25 x 1.5	313.0	233.0	3.5	8.0	16	326.0	34	38	8	-	30	30	10

PERFORMANCE TABLE

Series	Stroke	Energy absorption		Effective mass				Return spring force		Torque*	Weight				
		Nm/stroke	Nm/h	-0 / -4 very soft		-1 / -5 soft		-2 / -6 medium				-3 / -7 hard			
				min.kg	max.kg	min.kg	max.kg	min.kg	max.kg			min. N	max. N		
WM-S 0.1	6.0	3	14,100	-	-	0.5	4.5	2	10	5	13	2	5	5	10
WM-S 0.15	7.0	6	25,000	-	-	1.0	15.0	12	28	18	38	3	6	6	20
WM-S 0.2	10.0	8	26,000	-	-	1.0	15.0	10	38	20	58	4	10	10	30
WM-S 0.25	12.5	19	33,250	0.5	3.0	1.0	10.0	9	80	75	195	4	11	20	55
WM-S 0.35	13.0	30	39,000	1.0	7.0	3.0	24.0	17	170	120	530	12	19	20	80
WM-S 0.5	19.0	40	46,000	1.0	9.0	3.0	32.0	24	250	220	990	12	19	25	140
WM-S 0.5 x 40	40.0	60	60,000	1.0	10.0	4.0	40.0	30	350	320	1500	9	18	25	210
WM-S 1.0	25.0	70	70,000	1.1	15.0	10.0	140.0	115	1060	490	2400	12	28	30	275
WM-S 1.0 x 40	40.0	130	117,000	2.0	30.0	20.0	230.0	190	750	700	2500	6	17	30	330
WM-S 1.0 X 80	80.0	250	150,000	4.0	35.0	15.0	250.0	210	850	800	2800	14	31	30	630

Adjustable

WM-E SERIES 0.15; 0.2; 0.25; 0.35; 0.5; 1.0



- integrated end stop
- variable adjustment
- impact speed:
E 0.1; 0.15; 0.2: 0.1 - 1.2 m/s
E 0.25; 0.35: 0.1 - 3.3 m/s
E 0.5; 1.0: 0.1 - 3.3 m/s
- quick set back of the piston rod by a special integrated return spring

Special threads available in stock:

- WM-E 0.15: 3/8-32 UNEF
- WM-E 0.2: 7/16-28 UNEF
- WM-E 0.25: M 14 x 1; M 15 x 1, 1/2-20 UNF; 9/16-18 UNF
- WM-E 0.35: M 16 x 1
- WM-E 0.5: M 20 x 1; M 20 x 1.25; M 22 x 1; 3/4-16 UNF
- WM-E 0.15 x 19: M 20 x 1; M 20 x 1.25; M 22 x 1; 3/4-16 UNF
- WM-E 1.0: M 24 x 1.25; M 24 x 1.5; M 25 X 2; M 27 X 1.5; M 27 X 2; M 26 X 1.5; 1 - 12 UNF
- WM-E 1.0 X 40: M 27 x 1.5; M 27 x 2; 1 - 12 UNF

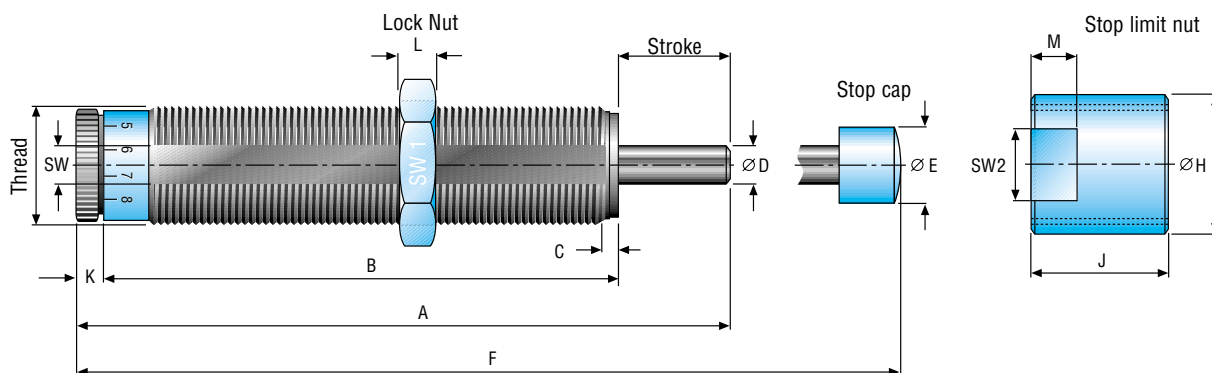
- any kind of mounting position
- housing: black finish
- piston rod: hardened stainless steel
- temperature range: -20°C ... + 90°C.
- 1 lock nut included
- on request: stop cap to reduce the noise (add "A" after the part no.)

Shock absorbers in stainless steel available in stock:

- WM-E 0.25 m
- WM-E 0.35 m
- WM-E 0.5 m
- WM-E 0.15 x 19
- WM-E 1.0 mT
- WM-E 1.0 mR

Special versions:

- seals/specific oil for high temperature
- Clevis mounting
- nickel-plated
- sea water resistant



DIMENSIONS

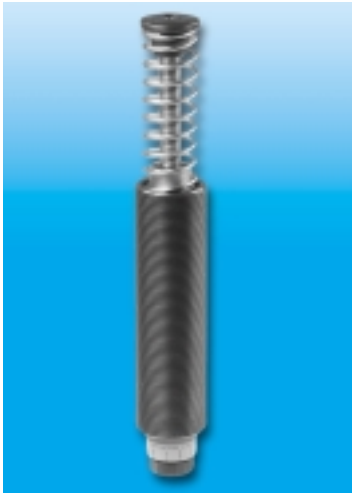
Series	Thread	A	B	C	ØD	ØE	F	ØH	J	L	SW	SW1	SW2	M
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
WM-E 0.15 m	M 10 x 1	61.0	50.5	3.5	3.0	6	67.0	14	15	3	-	13	-	-
WM-S 0.2 m	M 12 x 1	74.5	61.0	3.5	4.0	10	82.5	16	20	4	-	14	-	-
WM-S 0.25 m	M 14 x 1.5	74.5	61.0	3.5	4.0	10	82.5	18	20	5	12	17	15	6
WM-S 0.35 m	M 16 x 1.5	94.0	77.0	3.5	6.0	12	104.0	21	25	6	14	19	19	8
WM-S 0.5 m	M 20 x 1.5	104.0	85.0	3.5	6.0	12	114.0	25	35	6	18	24	22	8
WM-S 0.5 m x 19	M 20 x 1.5	110.0	85.0	3.5	6.0	12	120.0	25	35	6	18	24	22	8
WM-S 1.0 mT	M 25 x 1.5	141.0	108.0	3.5	8.0	16	154.0	34	38	8	23	30	30	10
WM-S 1.0 mR	M 27 x 3	141.0	108.0	3.5	8.0	16	154.0	34	38	8	23	30	30	10
WM-S 1.0T x 40	M 25 x 1.5	133.0	130.0	3.5	8.0	16	191.0	34	38	8	23	30	30	10

PERFORMANCE TABLE

Series	Stroke	Energy absorption	Effective mass		Return spring force		Torque*	Weight	
			min.kg	max.kg	min. N	max. N			
	mm	Nm/stroke	Nm/h						
WM-E 0.15 m	8	4.5	12,000	0.3	15	3	6	6	25
WM-S 0.2 m	10	5	15,000	0.7	35	5	9	10	40
WM-S 0.25 m	10	5	15,000	0.7	55	4	8	20	55
WM-S 0.35 m	13	17	25,500	1.5	160	4	11	20	80
WM-S 0.5 m	13	20	25,000	3	210	12	19	25	150
WM-S 0.5 m x 19	19	25	35,000	2	220	12	19	25	155
WM-S 1.0 m	25	85	70,000	10	1,500	12	28	30	290

Adjustable

WM-E SERIES 1,2



- variable adjustment
- impact speed: 0.1 - 3.3 m/s
- quick set back of the piston rod by a special integrated return spring
- any kind of mounting position
- housing: black finish

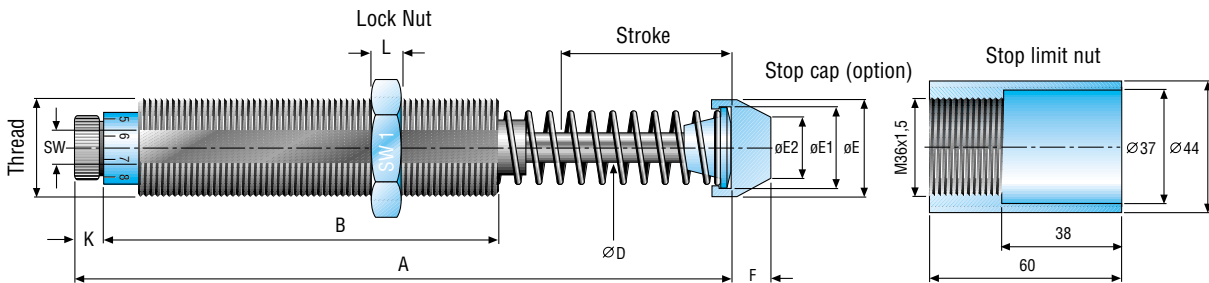
Special threads available in stock:

- WM-E 1.2: M 32 x 1.5; M 33 x 1.5; 1 1/4 - 12 UNF

- piston rod: hardened stainless steel
- temperature range: -20°C ... + 90°C.
- 1 lock nut included
- on request: stop cap to reduce the noise (add "A" after the part no.)

Special versions:

- seals/specific oil for high temperature
- nickel-plated
- sea water resistant

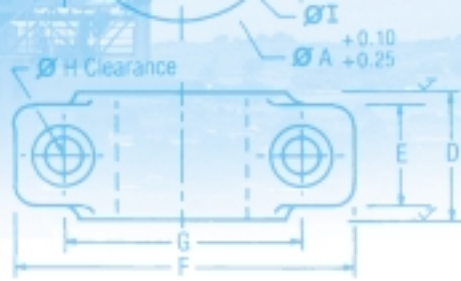


DIMENSIONS

Series	Thread	A	B	ØD	ØE	ØE1	ØE2	F	K	L	SW	SW1
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
WM-E 1.2 m x 1	M 36 x 1.5	168	103	10	32	26	20	13	8	8	32	41
WM-E 1.2 m x 2	M 36 x 1.5	212	130	10	32	26	20	13	8	8	32	41

PERFORMANCE TABLE

Series	Stroke	Energy absorption	Effective mass	Return spring force	Torque*	Weight			
	mm	Nm/stroke	Nm/h	min.kg	max.kg	min. N	max. N	max. Nm	g
WM-E 1.2 m x 1	25	110	82,000	10	1,800	40	70	40	660
WM-E 1.2 m x 2	50	225	97,000	13	2,700	45	80	40	820

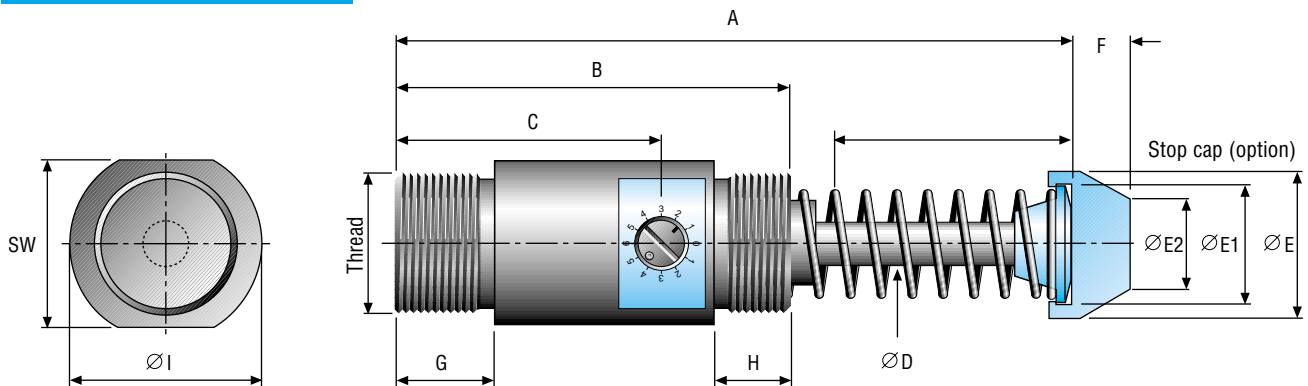


Adjustable

WM-E SERIES 1.25; 1.5



- variable adjustment
 - impact speed:
 - 1: 0.2 - 4.5 m/s
 - 2: 0.02 - 0.5 m/s
 - quick set back of the piston rod by a special integrated return spring
 - any kind of mounting position
 - housing: black finish
- Special versions:**
- different connection threads
 - seals/specific oil for high temperatures
 - nickel-plated
 - sea water resistant
- piston rod: hardened stainless or hard chrome-plated steel
 - temperature range: -20°C ... + 90°C.
 - on request:
 - stop cap to reduce the noise (add "A" after the part no.)
 - stop limit nut
 - lock nut



DIMENSIONS

Series	Thread	A	B	C	ØD	ØE	ØE1	ØE2	F	G	H	ØI	SW
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
WM-E 1.25 UNF x 1	1 1/4 -12 UNF	139	83	49.0	10	32	26	20	13	20	15	40	-
WM-E 1.25 UNF x 2	1 1/4 -12 UNF	189	109	75.0	10	32	26	20	13	20	15	40	-
WM-E 1.5 UNF x 1	1 3/4 - 12 UNF	144	94	51.0	14	45	38	26	17	30	23	57	50
WM-E 1.5 UNF x 2	1 3/4 - 12 UNF	205	120	76.0	14	45	38	26	17	30	23	57	50
WM-E 1.5 UNF x 3	1 3/4 - 12 UNF	251	145	97.0	14	45	38	26	17	30	23	57	50
WM-E 1.5 m x 1	M 42 X 1.5	144	94	51.0	14	45	38	26	17	30	23	57	50
WM-E 1.5 m x 2	M 42 X 1.5	205	120	76.0	14	45	38	26	17	30	23	57	50
WM-E 1.5 m x 3	M 42 X 1.5	251	145	97.0	14	45	38	26	17	30	23	57	50

PERFORMANCE TABLE

Series	Stroke mm	Energy absorption			Effective mass				Return spring force		Weight kg
		Nm/stroke	Nm/h		-1		-2		min. N	max. N	
			Standard	External Tank	min.kg	max.kg	min.kg	max.kg			
WM-E 1.25 UNF x 1	25	110	82,000	145,000	8	435	360	47,000	40	70	0.640
WM-E 1.25 UNF x 2	50	225	97,000	155,000	13	785	460	77,000	45	80	0.720
WM-E 1.5 m/UNF x 1	25	250	132,000	185,000	35	3,500	3,100	100,000	60	90	1.110
WM-E 1.5 m/UNF x 2	50	500	150,000	238,000	50	6,150	4,800	170,000	60	120	1.470
WM-E 1.5 m/UNF x 3	75	750	190,000	287,000	60	9,200	6,500	190,000	50	140	1.800

Self-compensating progressive

WM-P SERIES 0.25; 0.5; 1.0



- progressive absorption
- integrated end stop
- impact speed:
P 0.25: 0.3 - 4.0 m/s
P 0.5; 1.0: 0.3 - 6.0 m/s
- quick set back of the piston rod by a special integrated return spring

Special threads available in stock:

- WM-P 0.25: M 14 x 1; 1/2-20 UNF; 9/16-18 UNF
- WM-P 0.5: M 20 x 1; 3/4-16 UNF
- WM-P 1.0: M 24 x 1.25; M 24 x 1.5; M 25 X 2; M 27 X 1.5; M 27 X 2; M 26 X 1.5; 1 - 12 UNF

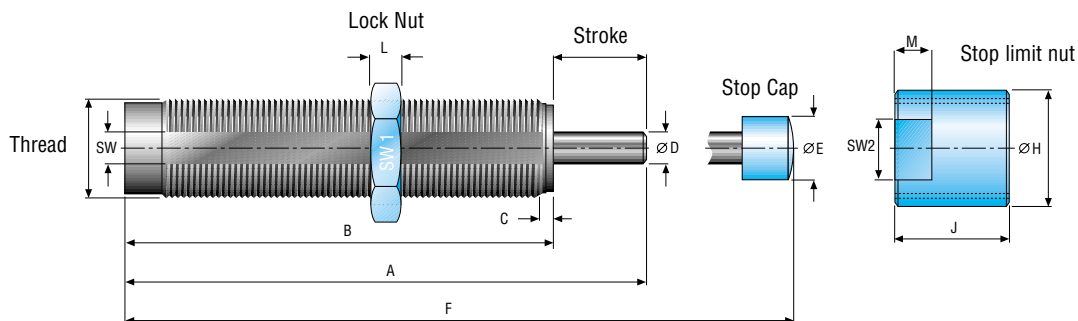
- any kind of mounting position
- housing: black finish
- piston rod: hardened stainless steel
- temperature range: -20°C ... + 90°C.
- included: 1 lock nut
1 stop cap to reduce the noise
- on request: proximity switch

Shock absorbers in stainless steel available in stock:

- WM-P 0.25
- WM-P 0.5
- WM-P 1.0-0/1/2/3

Special versions:

- different absorption characteristics
- seals/specific oil for high temperatures
- Clevis mounting
- nickel-plated
- sea water resistant

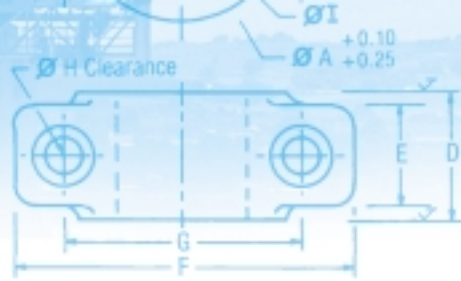


DIMENSIONS

Series	Thread	A	B	ØD	ØE	F	ØH	J	L	SW	SW1	SW2	M
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
WM-P 0.25-1/2/3	M 14 x 1.5	98	82	4	10	106	18	20	5	12	17	15	6
WM-P 0.5-1/2/3	M 20 x 1.5	120	98	6	12	130	25	35	6	18	24	22	8
WM-P 1.0-1/2/3	M 25 x 1.5	133	108	8	16	146	34	38	8	23	30	30	10

PERFORMANCE TABLE

Series	Stroke mm	Energy absorption Nm/stroke	Effective mass						Return spring force		Torque* max. Nm	Weight g	
			-1 / -5 soft		-2 / -6 medium		-3 / -7 hard		min. N	max. N			
			min.kg	max.kg	min.kg	max.kg	min.kg	max.kg					
WM-P 0.25-1/2/3	16	21	34,650	1	4.5	4.4	14	13	54	4	11	20	70
WM-P 0.5-1/2/3	22	45	52,200	1	10	9	35	32	320	12	19	25	160
WM-P 1.0-1/2/3	25	70	70,000	1.5	12	10	45	42	570	12	28	30	275



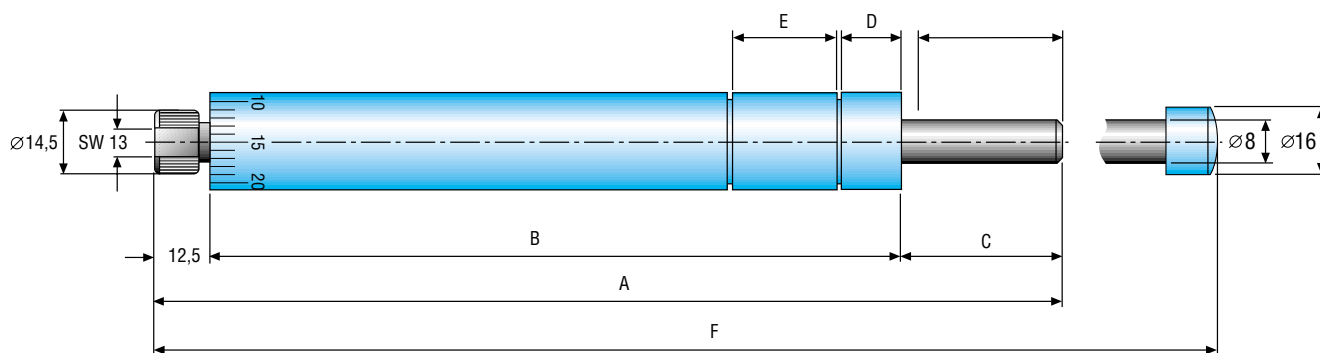
Adjustable hydraulic speed controls



- variable adjustment
 - speed rates: see performance table
 - quick set back of the piston rod by a special integrated return spring
 - any kind of mounting position
 - housing: black finish
 - piston rod: hardened stainless steel
 - temperature range: -20°C ... + 90°C.
- 1 retaining ring included
 - on request: stop cap to reduce noise (add "A" after the part no.)

Special versions:

- thread M 24 x 1.5; length 40 mm
- nickel-plated
- sea water resistant



DIMENSIONS

Series	A mm	B mm	C mm	D mm	E mm	F mm	T mm
WM-V 10	161	128	21	21.5	25.4	166	32
WM-V 20	202	157	33	19.1	25.4	207	32
WM-V 30	278	208	58	14.6	25.4	283	32
WM-V 40	351	256	83	14.6	25.4	356	51
WM-V 50	417	298	106	14.6	25.4	422	51
WM-V 60	524	380	131	14.6	25.4	529	51
WM-V 70	584	415	156	14.6	25.4	589	51

PERFORMANCE TABLE

Series	Stroke mm	Speed force		Speed rates		Return spring force		Weight g
		min. N	max. N	m/min	min. kg	min. N	max. N	
				-1	-2			
WM-V 10	13	25	3,700	12 - 40	0.015 - 15	12	28	350
WM-V 20	25	25	3,700	12 - 40	0.015 - 15	12	28	450
WM-V 30	50	35	3,700	12 - 40	0.015 - 15	15	32	550
WM-V 40	75	45	3,700	12 - 40	0.015 - 15	15	32	650
WM-V 50	100	45	3,700	12 - 40	0.015 - 15	15	32	800
WM-V 60	125	45	3,700	12 - 40	0.015 - 15	16	40	970
WM-V 70	150	45	3,700	12 - 40	0.015 - 15	16	40	1050

A complete selection of quality springs for machine building, dies, jigs, fixtures and general tool work.



LIGHT LOAD
Green Colour Coded



MEDIUM LOAD
Blue Colour Coded



HEAVY LOAD
Red Colour Coded



EXTRA HEAVY LOAD
Yellow Colour Coded

Brauer offers a complete line of Die Springs manufactured to quality standards consistent with a long-standing reputation in the stamping and die-making industries for providing reliable, carefully engineered products.

Brauer Die Springs are engineered to offer significantly longer life in die applications as well as applications such as industrial clutches, brakes, farm machinery and aircraft mechanisms.

Brauer Die Springs are offered in a range of lengths, diameters and load classifications that conform to the ISO 10243 International Standard, including colour coding for easy identification of load range.

Our catalogue is designed to assist you with spring selection for your particular requirement, and includes selection formulae for use when designing springs into your application, as well as dimensional, load travel and rate information for each of the 489 rectangular and round wire springs that are available from Brauer as standard.

Contact **BRAUER**[®] for your
Springs Catalogue

ALSO AVAILABLE FROM **BRAUER**[®]

MACHINE ACCESSORIES



ROBOTIC GRIPPERS AND HANDLING MODULES



ROTARY/LINEAR BEARINGS



CLAMPING PRODUCTS



PNEUMATIC WORKHOLDING



LATCH CLAMPS



HOOK CLAMPS



DOWEL PINS



AIRMOVERS



FOR FURTHER DETAILS CONTACT

BRAUER[®]

DAWSON ROAD, MOUNT FARM, MILTON KEYNES MK1 1JP
TEL: 01908 - 374022 FAX: 01908 - 641628
e-mail: sales@brauer.co.uk web: www.brauer.co.uk