

Speed Control Shock Absorbers



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Speed Controls

WV-M



Speed rates: 0,015 - 40 m/min

ProSurf

Long-life surface protection (p. 9)

Adjustment

Variable

Extended Life Time

Special Seals + Oils

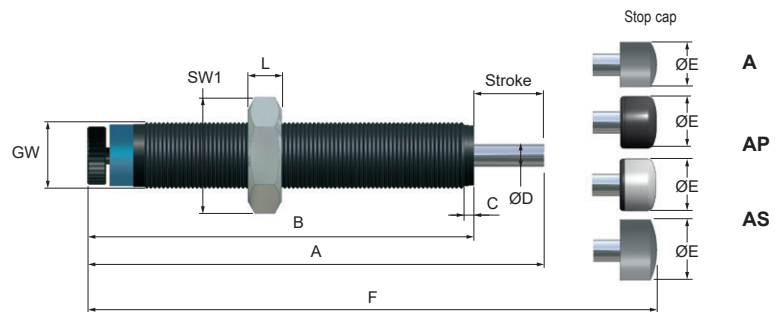
Piston rod: hardened stainless steel

Integrated End Stop

Flats

RoHS compliant

Directive 2002/95/EC



*A: Plastic / AP: Soft Touch / AS: Steel

DIMENSIONS

GW		A	B	C	Ø D	Ø E (A)	Ø E (AP)	Ø E (AS)	F (A)	F (AP)	F (AS)	K	L	SW	SW 1
		mm (inch)													
WV-M 0,25	M 14x1	96 (3.78)	82 (3.23)	2,5 (0.1)	4 (0.16)	10 (0.39)	10 (0.39)	10 (0.39)	105 (4.13)	105 (4.13)	105 (4.13)	4 (0.16)	5 (0.2)	13 (0.51)	17 (0.67)
WV-M 0,35	M 16x1	96 (3.78)	82 (3.23)	2,5 (0.1)	4 (0.16)	10 (0.39)	10 (0.39)	10 (0.39)	105 (4.13)	105 (4.13)	105 (4.13)	4 (0.16)	6 (0.24)	14 (0.55)	19 (0.75)
WV-M 0,5x19	M 20x1	113 (4.45)	94 (3.7)	2,5 (0.1)	6 (0.24)	12 (0.47)	12 (0.47)	17 (0.67)	123 (4.84)	125 (4.92)	123 (4.84)	6 (0.24)	6 (0.24)	18 (0.71)	24 (0.94)
WV-M 1,0	M 24x1,5	141 (5.55)	114 (4.49)	3,5 (0.14)	8 (0.31)	16 (0.63)	21 (0.83)	20 (0.79)	154 (6.06)	156 (6.14)	154 (6.06)	6 (0.24)	8 (0.31)	23 (0.91)	30 (1.18)
WV-M 1,0x40	M 24x1,5	178 (7.01)	136 (5.35)	3,5 (0.14)	8 (0.31)	16 (0.63)	21 (0.83)	20 (0.79)	191 (7.52)	193 (7.6)	191 (7.52)	6 (0.24)	8 (0.31)	23 (0.91)	30 (1.18)
WV-M 0,25UC	9/16-18	96 (3.78)	82 (3.23)	2,5 (0.1)	4 (0.16)	10 (0.39)	10 (0.39)	10 (0.39)	105 (4.13)	105 (4.13)	105 (4.13)	4 (0.16)	5 (0.2)	13 (0.51)	17 (0.67)
WV-M 0,5x19U	3/4-16	113 (4.45)	94 (3.7)	2,5 (0.1)	6 (0.24)	12 (0.47)	12 (0.47)	17 (0.67)	123 (4.84)	125 (4.92)	123 (4.84)	6 (0.24)	6 (0.24)	18 (0.71)	24 (0.94)
WV-M 1,0U	1 - 12	141 (5.55)	114 (4.49)	3,5 (0.14)	8 (0.31)	16 (0.63)	21 (0.83)	20 (0.79)	154 (6.06)	156 (6.14)	154 (6.06)	6 (0.24)	8 (0.31)	23 (0.91)	30 (1.18)
WV-M 1,0x40U	1-12	178 (7.01)	136 (5.35)	3,5 (0.14)	8 (0.31)	16 (0.63)	21 (0.83)	20 (0.79)	191 (7.52)	193 (7.6)	191 (7.52)	6 (0.24)	8 (0.31)	23 (0.91)	30 (1.18)

PERFORMANCE

	Stroke mm (inch)	Speed force		Speed rates m / min (inch / min)				Return spring force		Weight kg (lbs)
		min. N (min. lbs)	max. N (max. lbs)	min. -1	max. -1	min. -2	max. -2	min. N (min. lbs)	max. N (max. lbs)	
WV-M 0,25	14 (0.55)	20 (4.5)	500 (112.4)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	13 (2.92)	23 (5.17)	0,05 (0.11)
WV-M 0,35	14 (0.55)	20 (4.5)	700 (157.37)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	13 (2.92)	23 (5.17)	0,07 (0.15)
WV-M 0,5x19	19 (0.75)	25 (5.62)	1800 (404.66)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	12 (2.7)	23 (5.17)	0,14 (0.31)
WV-M 1,0	25 (0.98)	70 (15.74)	3600 (809.31)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	15 (3.37)	31 (6.97)	0,29 (0.64)
WV-M 1,0x40	40 (1.57)	80 (17.98)	3600 (809.31)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	11 (2.47)	20 (4.5)	0,39 (0.86)
WV-M 0,25UC	14 (0.55)	20 (4.5)	500 (112.4)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	13 (2.92)	23 (5.17)	0,05 (0.11)
WV-M 0,5x19U	19 (0.75)	25 (5.62)	1800 (404.66)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	12 (2.7)	23 (5.17)	0,14 (0.31)
WV-M 1,0U	25 (0.98)	70 (15.74)	3600 (809.31)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	15 (3.37)	31 (6.97)	0,29 (0.64)
WV-M 1,0x40U	40 (1.57)	80 (17.98)	3600 (809.31)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	11 (2.47)	20 (4.5)	0,39 (0.86)

Speed Controls

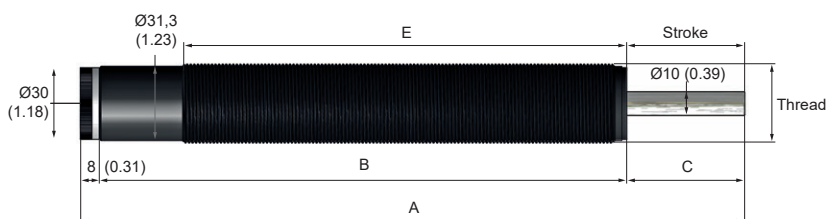
WV-M 1,25



High feed force: 10.000 N
Speed rates: 0,015 - 40 m/min

Adjustment: Variable
 Extended Life Time: Special Seals + Oils
 Piston rod: hardened stainless steel
 Housing: black finish

Integrated end stop
 Temperature: -20°C - +80°C (-4°F - +176°F)
 RoHS compliant: Directive 2002/95/EC



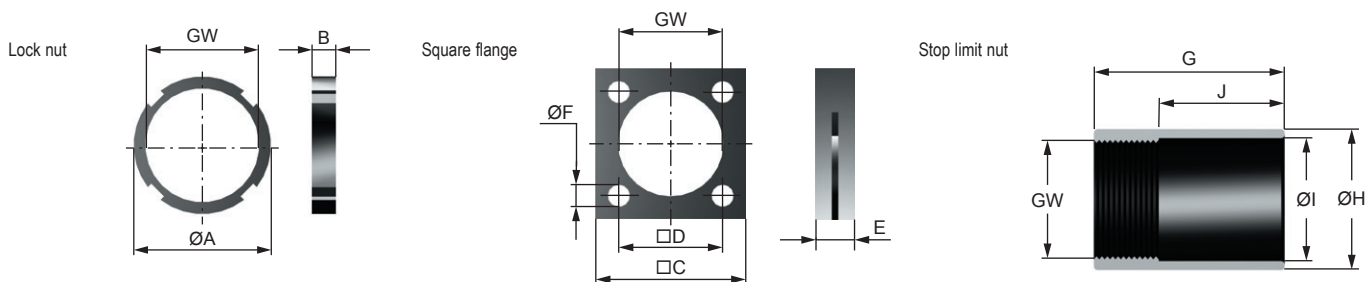
DIMENSIONS

	Thread	A	B	C	D	E
		mm (inch)				
WV-M 1,25x1	M33x1,5	231 (9.09)	198 (7.8)	25 (0.98)	5 (0.2)	163 (6.42)
WV-M 1,25x2	M33x1,5	281 (11.06)	223 (8.78)	50 (1.97)	5 (0.2)	188 (7.4)
WV-M 1,25x3	M33x1,5	331 (13.03)	248 (9.76)	75 (2.95)	5 (0.2)	213 (8.39)

PERFORMANCE

	Stroke mm (inch)	Speed force		Speed rates m / min (inch / min)				Return spring force		Weight kg (lbs)
		min. N (min. lbs)	max. N (max. lbs)	min. -1	max. -1	min. -2	max. -2	min. N (min. lbs)	max. N (max. lbs)	
WV-M 1,25x1	25 (0.98)	100 (22.48)	10000 (2248.09)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	35 (7.87)	100 (22.48)	0,95 (2.09)
WV-M 1,25x2	50 (1.97)	100 (22.48)	10000 (2248.09)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	35 (7.87)	100 (22.48)	1,05 (2.31)
WV-M 1,25x3	75 (2.95)	100 (22.48)	10000 (2248.09)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	35 (7.87)	100 (22.48)	1,15 (2.54)

ACCESSOIRES



Code: S23012H

Code: S23014H

Code: S23018H

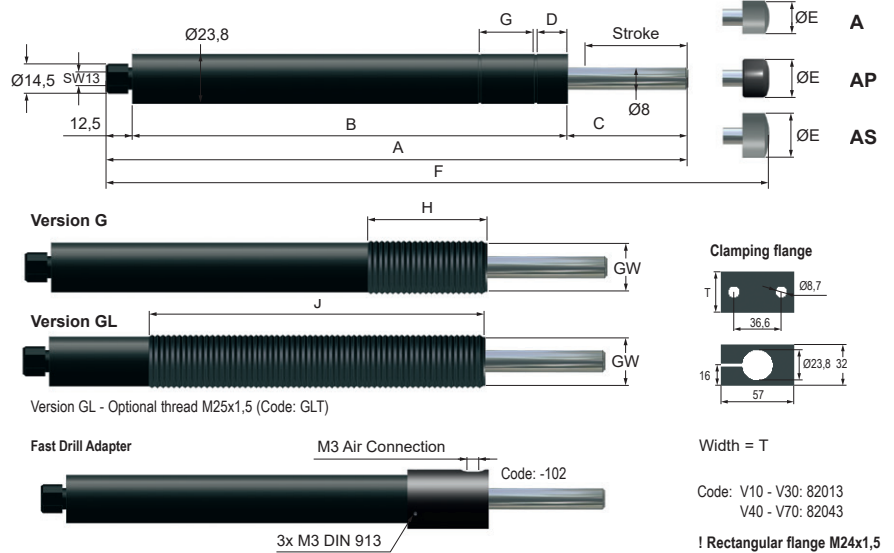
GW	Ø A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Ø F (mm)	G (mm)	Ø H (mm)	Ø I (mm)	J (mm)
M 33 x 1,5	38 (1.5)	6,5 (0.26)	45 (1.77)	32 (1.26)	12 (0.47)	6,6 (0.26)	60 (2.36)	38 (1.5)	33 (1.3)	35 (1.38)

Speed Controls

WM-V

Speed rates: 0,015 - 40 m/min

Adjustment Variable
 Extended Life Time Special Seals + Oils
 Piston rod: hardened stainless steel
 Housing: black finish
 Temperature -20°C - +80°C (-4°F - +176°F)
 RoHS compliant Directive 2002/95/EC



DIMENSIONS

	A	B	C	D	øE (A)	F (A)	øE (AP)	F (AP)	øE (AS)	F (AS)	G	T	H	J
	mm (inch)													
WM-V 10	161 (6.34)	128 (5.04)	21 (0.83)	21,5 (0.85)	16 (0.63)	166 (6.54)	21 (0.83)	168 (6.61)	16 (0.63)	166 (6.54)	25,4 (1)	32 (1.26)	40 (1.57)	93 (3.66)
WM-V 20	202 (7.95)	157 (6.18)	33 (1.3)	19,1 (0.75)	16 (0.63)	207 (8.15)	21 (0.83)	209 (8.23)	16 (0.63)	207 (8.15)	25,4 (1)	32 (1.26)	40 (1.57)	122 (4.8)
WM-V 30	278 (10.94)	208 (8.19)	58 (2.28)	14,6 (0.57)	16 (0.63)	283 (11.14)	21 (0.83)	285 (11.22)	16 (0.63)	283 (11.14)	25,4 (1)	32 (1.26)	40 (1.57)	173 (6.81)
WM-V 40	351 (13.82)	256 (10.08)	83 (3.27)	14,6 (0.57)	16 (0.63)	356 (14.02)	21 (0.83)	358 (14.09)	16 (0.63)	356 (14.02)	25,4 (1)	50 (1.97)	40 (1.57)	221 (8.7)
WM-V 50	417 (16.42)	298 (11.73)	106 (4.17)	14,6 (0.57)	16 (0.63)	422 (16.61)	21 (0.83)	424 (16.69)	16 (0.63)	422 (16.61)	25,4 (1)	50 (1.97)	40 (1.57)	263 (10.35)
WM-V 60	524 (20.63)	381 (15)	131 (5.16)	14,6 (0.57)	16 (0.63)	529 (20.83)	21 (0.83)	531 (20.91)	16 (0.63)	529 (20.83)	25,4 (1)	50 (1.97)	40 (1.57)	-
WM-V 70	584 (22.99)	415 (16.34)	156 (6.14)	14,6 (0.57)	16 (0.63)	589 (23.19)	21 (0.83)	591 (23.27)	16 (0.63)	589 (23.19)	25,4 (1)	50 (1.97)	40 (1.57)	-

PERFORMANCE

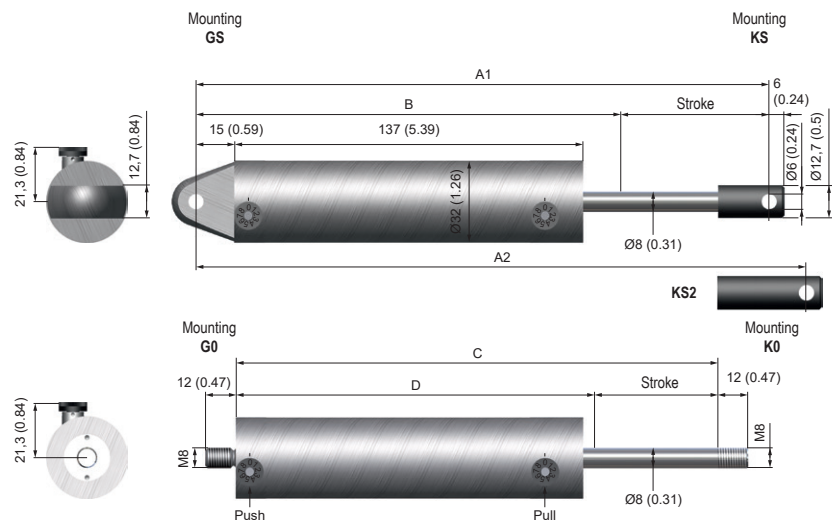
	Stroke mm (inch)	Speed force		Speed rates m / min (inch / min)				Return spring force		Weight kg (lbs)
		min. N (min. lbs)	max. N (max. lbs)	min. -1	max. -1	min. -2	max. -2	min. N (min. lbs)	max. N (max. lbs)	
WM-V 10	13 (0.51)	25 (5.62)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	12 (2.7)	28 (6.29)	0,35 (0.77)
WM-V 20	25 (0.98)	25 (5.62)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	12 (2.7)	28 (6.29)	0,45 (0.99)
WM-V 30	50 (1.97)	35 (7.87)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	15 (3.37)	32 (7.19)	0,5 (1.1)
WM-V 40	75 (2.95)	45 (10.12)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	15 (3.37)	32 (7.19)	0,65 (1.43)
WM-V 50	100 (3.94)	45 (10.12)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	15 (3.37)	32 (7.19)	0,8 (1.76)
WM-V 60	125 (4.92)	45 (10.12)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	16 (3.6)	40 (8.99)	0,97 (2.14)
WM-V 70	150 (5.91)	45 (10.12)	3700 (831.79)	12 (472.44)	40 (1574.8)	0,015 (0.59)	15 (590.55)	16 (3.6)	40 (8.99)	1,05 (2.31)

WM-VD 32



Precise adjustment in Push- and Pull direction
Continuous adjustment over the entire stroke

Deceleration	Double-acting
Surface protection	Housing: anodised aluminium
Extended life time	Piston rod: hard-chrome plated
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/E



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PERFORMANCE

	Stroke	Pull	Push	Pull - Push	Speed rates	A1	A2	B	C	D	Weight
	mm (inch)	N max. (lbs max.)	N max. (lbs max.)	N min. (lbs min.)	m/min (ft./min)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	g (lbs)
WM-VD 32 - 050	50 (1.97)	2000 (449.62)	2000 (449.62)	40 (8.99)	0,015 - 40 (0.05 - 132)	225 (8.86)	250 (9.84)	175 (6.89)	190 (7.48)	140 (5.51)	370 (0.82)
WM-VD 32 - 075	75 (2.95)	2000 (449.62)	2000 (449.62)	40 (8.99)	0,015 - 40 (0.05 - 132)	275 (10.83)	300 (11.81)	200 (7.87)	235 (9.25)	165 (6.5)	420 (0.93)
WM-VD 32 - 100	100 (3.94)	2000 (449.62)	1700 (382.18)	40 (8.99)	0,015 - 40 (0.05 - 132)	325 (12.8)	350 (13.78)	225 (8.86)	290 (11.42)	190 (7.48)	470 (1.04)
WM-VD 32 - 150	150 (5.91)	2000 (449.62)	1400 (314.73)	40 (8.99)	0,015 - 40 (0.05 - 132)	425 (16.73)	450 (17.72)	275 (10.83)	390 (15.35)	240 (9.45)	570 (1.26)
WM-VD 32 - 200	200 (7.87)	2000 (449.62)	1000 (224.81)	40 (8.99)	0,015 - 40 (0.05 - 132)	525 (20.67)	550 (21.65)	325 (12.8)	490 (19.29)	290 (11.42)	670 (1.48)
WM-VD 32 - 250	250 (9.84)	2000 (449.62)	600 (134.89)	40 (8.99)	0,015 - 40 (0.05 - 132)	625 (24.61)	650 (25.59)	375 (14.76)	590 (23.23)	340 (13.39)	770 (1.7)

Ordering Information

WM-VD 32-100-K2G4-C

WM Weforma	K2 Piston rod - Angle joint
VD Speed control, double-acting	G4 Housing - Spherical end bearing
32 Size	C Type of deceleration: A=push, B=pull, C=push and pull
100 Stroke	

WM-VD 36



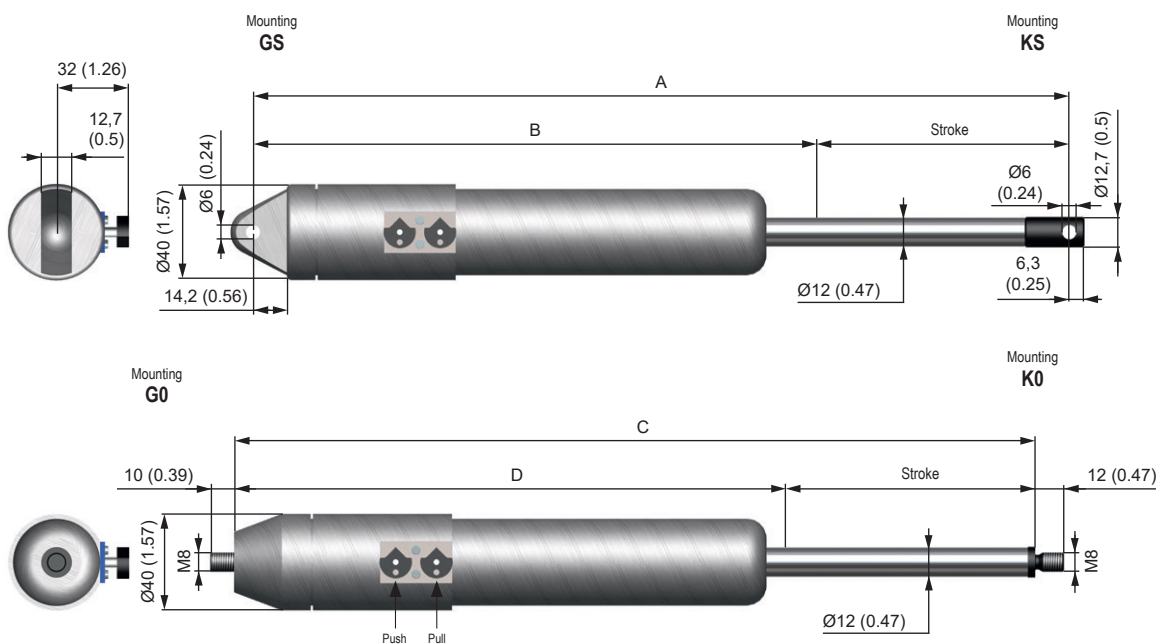
Precise adjustment in Push- and Pull direction
Continuous adjustment over the entire stroke

Deceleration	Double-acting
Surface protection	Housing: anodised aluminium
Extended life time	Piston rod: hard-chrome plated
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/E

Ordering Information

WM-VD 36-100-K2G4-C

WM	Weforma	K2	Piston rod - Angle joint
VD	Speed control, double-acting	G4	Housing - Spherical end bearing
36	Size	C	Type of deceleration: A=push, B=pull, C=push and pull
100	Stroke		



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PERFORMANCE

	Stroke	Pull	Push	Pull - Push	Speed rates	A	B	C	D	Weight
	mm (inch)	N max. (lbs max.)	N max. (lbs max.)	N min. (lbs min.)	m/min (ft/min)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	g (lbs)
WM-VD 36 - 050	50 (1.97)	4000 (899.24)	4000 (899.24)	60 (13.49)	0,015 - 40 (0.05 - 132)	250 (9.84)	200 (7.87)	240 (9.45)	190 (7.48)	420 (0.93)
WM-VD 36 - 100	100 (3.94)	4000 (899.24)	3500 (786.84)	60 (13.49)	0,015 - 40 (0.05 - 132)	350 (13.78)	250 (9.84)	340 (13.39)	240 (9.45)	470 (1.04)
WM-VD 36 - 150	150 (5.91)	4000 (899.24)	2000 (449.62)	60 (13.49)	0,015 - 40 (0.05 - 132)	450 (17.72)	300 (11.81)	440 (17.32)	290 (11.42)	520 (1.15)
WM-VD 36 - 200	200 (7.87)	4000 (899.24)	1800 (404.66)	60 (13.49)	0,015 - 40 (0.05 - 132)	550 (21.65)	350 (13.78)	540 (21.26)	340 (13.39)	570 (1.26)
WM-VD 36 - 250	250 (9.84)	4000 (899.24)	1500 (337.22)	60 (13.49)	0,015 - 40 (0.05 - 132)	650 (25.59)	400 (15.75)	640 (25.2)	390 (15.35)	650 (1.43)

Double-Acting Speed Controls

WM-VD 50 / 70 / 85 / 100



Precise adjustment in Push- and Pull direction
Continuous adjustment over the entire stroke

Deceleration	Double-acting
Surface protection	Housing: zinc plated steel
Extended life time	Piston rod: hard-chrome plated
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/E

Ordering Information

WM-VD 70-100-E1-K1G3-C

WM	Weforma	C	Type of deceleration: A=push, B=pull, C=push and pull
VD	Speed control, double-acting	E1 / E2	E1 = Adjusting screw standard, E2 = Larger adjustment screw
70	Size	K1	Piston rod - Male rod clevis
100	Stroke	G3	Housing - Female rod clevis

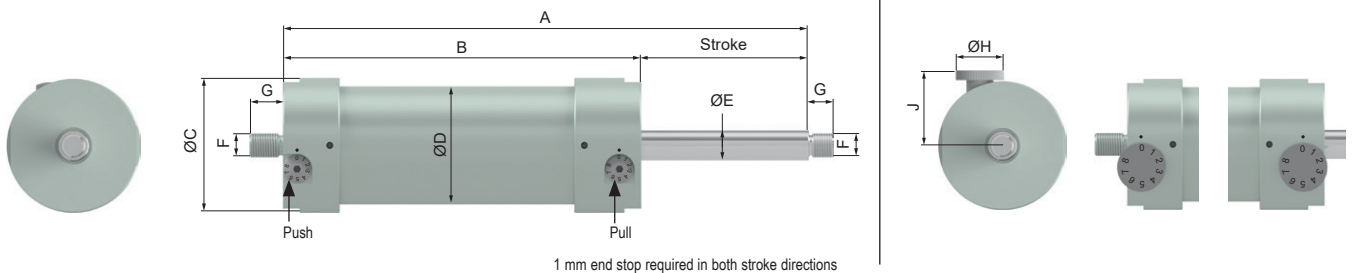
E1

Mounting
G0

Mounting
K0

E2

larger adjustment screw



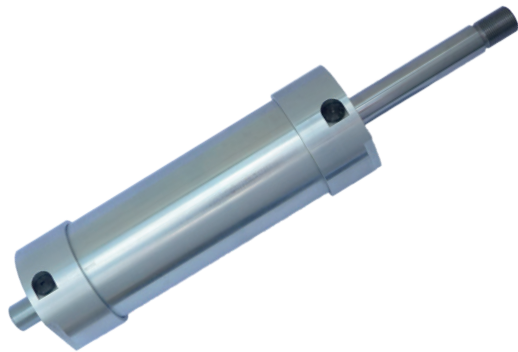
PERFORMANCE

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	Stroke	Pull	Push	A	B	ØC	ØD	ØE	F	G	ØH	J	Weight
	mm (inch)	N max.	N max.	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lbs)
WM-VD 50-050	50 (1.97)	11000 (2472.91)	11000 (2472.91)	196 (7.72)	146 (5.75)	60 (2.36)	50 (1.97)	14 (0.55)	M10	12 (0.47)	22 (0.87)	37,5 (1.48)	2,2 (5)
WM-VD 50-100	100 (3.94)	11000 (2472.91)	11000 (2472.91)	296 (11.65)	196 (7.72)	60 (2.36)	50 (1.97)	14 (0.55)	M10	12 (0.47)	22 (0.87)	37,5 (1.48)	2,6 (6)
WM-VD 50-150	150 (5.91)	11000 (2472.91)	11000 (2472.91)	396 (15.59)	246 (9.69)	60 (2.36)	50 (1.97)	14 (0.55)	M10	12 (0.47)	22 (0.87)	37,5 (1.48)	3,1 (7)
WM-VD 50-200	200 (7.87)	11000 (2472.91)	11000 (2472.91)	496 (19.53)	296 (11.65)	60 (2.36)	50 (1.97)	14 (0.55)	M10	12 (0.47)	22 (0.87)	37,5 (1.48)	3,5 (8)
WM-VD 50-250	250 (9.84)	11000 (2472.91)	11000 (2472.91)	596 (23.46)	346 (13.62)	60 (2.36)	50 (1.97)	14 (0.55)	M10	12 (0.47)	22 (0.87)	37,5 (1.48)	4 (9)
WM-VD 50-300	300 (11.81)	11000 (2472.91)	11000 (2472.91)	696 (27.4)	396 (15.59)	60 (2.36)	50 (1.97)	14 (0.55)	M10	12 (0.47)	22 (0.87)	37,5 (1.48)	4,4 (10)
WM-VD 70-100	100 (3.94)	18000 (4046.58)	18000 (4046.58)	314 (12.36)	214 (8.43)	80 (3.15)	70 (2.76)	18 (0.71)	M14x1,5	20 (0.79)	30 (1.18)	48 (1.89)	4,9 (11)
WM-VD 70-150	150 (5.91)	18000 (4046.58)	18000 (4046.58)	414 (16.3)	264 (10.39)	80 (3.15)	70 (2.76)	18 (0.71)	M14x1,5	20 (0.79)	30 (1.18)	48 (1.89)	5,2 (11)
WM-VD 70-200	200 (7.87)	18000 (4046.58)	18000 (4046.58)	514 (20.24)	314 (12.36)	80 (3.15)	70 (2.76)	18 (0.71)	M14x1,5	20 (0.79)	30 (1.18)	48 (1.89)	5,8 (13)
WM-VD 70-300	300 (11.81)	18000 (4046.58)	18000 (4046.58)	714 (28.11)	414 (16.3)	80 (3.15)	70 (2.76)	18 (0.71)	M14x1,5	20 (0.79)	30 (1.18)	48 (1.89)	7 (15)
WM-VD 70-400	400 (15.75)	18000 (4046.58)	15000 (3372.15)	914 (35.98)	514 (20.24)	80 (3.15)	70 (2.76)	18 (0.71)	M14x1,5	20 (0.79)	30 (1.18)	48 (1.89)	8,2 (18)
WM-VD 70-500	500 (19.69)	18000 (4046.58)	12000 (2697.72)	1114 (43.86)	614 (24.17)	80 (3.15)	70 (2.76)	18 (0.71)	M14x1,5	20 (0.79)	30 (1.18)	48 (1.89)	9,4 (21)

Double-Acting Speed Controls

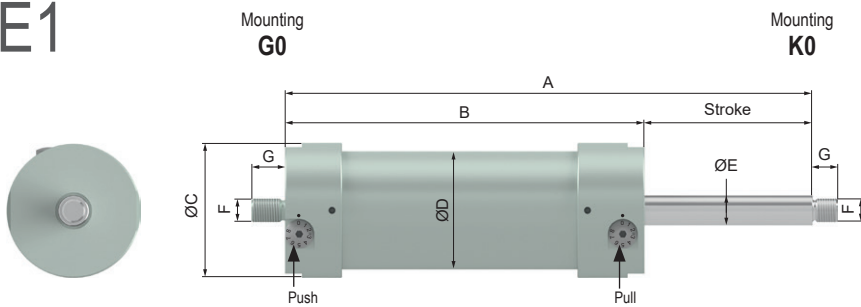
WM-VD 50 / 70 / 85 / 100



Precise adjustment in Push- and Pull direction
Continuous adjustment over the entire stroke

Deceleration	Double-acting
Surface protection	Housing: zinc plated steel
Extended life time	Piston rod: hard-chrome plated
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/E

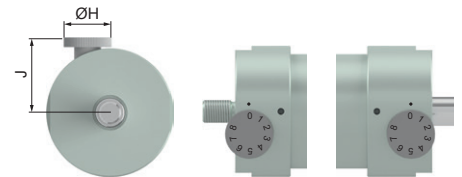
E1



1 mm end stop required in both stroke directions

E2

larger adjustment screw

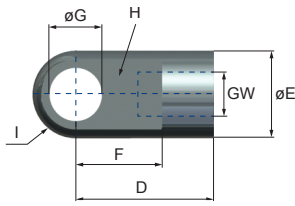


PERFORMANCE

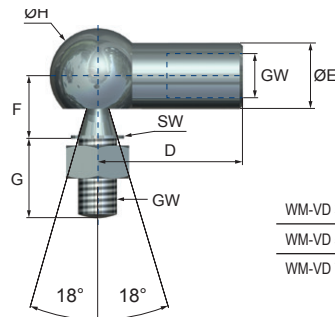
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	Stroke	Pull	Push	A	B	ØC	ØD	ØE	F	G	ØH	J	Weight
	mm (inch)	N max.	N max.	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lbs)
WM-VD 85-100	100 (3.94)	50000 (11240.5)	50000 (11240.5)	361 (14.21)	261 (10.28)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	9,2 (20)
WM-VD 85-150	150 (5.91)	50000 (11240.5)	40000 (8992.4)	461 (18.15)	311 (12.24)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	10,4 (23)
WM-VD 85-200	200 (7.87)	50000 (11240.5)	30000 (6744.3)	561 (22.09)	361 (14.21)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	11,5 (25)
WM-VD 85-250	250 (9.84)	50000 (11240.5)	20000 (4496.2)	661 (26.02)	411 (16.18)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	12,6 (28)
WM-VD 85-300	300 (11.81)	50000 (11240.5)	15000 (3372.15)	761 (29.96)	461 (18.15)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	13,7 (30)
WM-VD 85-400	400 (15.75)	50000 (11240.5)	10000 (2248.1)	961 (37.83)	561 (22.09)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	15,7 (35)
WM-VD 85-500	500 (19.69)	50000 (11240.5)	9000 (2023.29)	1161 (45.71)	661 (26.02)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	18,2 (40)
WM-VD 85-600	600 (23.62)	50000 (11240.5)	7000 (1573.67)	1361 (53.58)	761 (29.96)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	20,5 (45)
WM-VD 85-700	700 (27.56)	50000 (11240.5)	4000 (899.24)	1561 (61.46)	861 (33.9)	95 (3.74)	85 (3.35)	28 (1.1)	M24x2	35 (1.38)	30 (1.18)	54,4 (2.14)	22,7 (50)
WM-VD 110-100	100 (3.94)	90000 (20232.9)	90000 (20232.9)	410 (16.14)	310 (12.2)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	19,5 (43)
WM-VD 110-150	150 (5.91)	90000 (20232.9)	80000 (17984.8)	510 (20.08)	360 (14.17)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	21,3 (47)
WM-VD 110-200	200 (7.87)	90000 (20232.9)	75000 (16860.75)	610 (24.02)	410 (16.14)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	23,2 (51)
WM-VD 110-250	250 (9.84)	90000 (20232.9)	70000 (15736.7)	710 (27.95)	460 (18.11)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	25,1 (55)
WM-VD 110-300	300 (11.81)	90000 (20232.9)	50000 (11240.5)	810 (31.89)	510 (20.08)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	27 (60)
WM-VD 110-400	400 (15.75)	90000 (20232.9)	40000 (8992.4)	1010 (39.76)	610 (24.02)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	30,8 (68)
WM-VD 110-500	500 (19.69)	90000 (20232.9)	30000 (6744.3)	1210 (47.64)	710 (27.95)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	34,5 (76)
WM-VD 110-600	600 (23.62)	90000 (20232.9)	20000 (4496.2)	1410 (55.51)	810 (31.89)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	38,3 (84)
WM-VD 110-700	700 (27.56)	90000 (20232.9)	15000 (3372.15)	1610 (63.39)	910 (35.83)	120 (4.72)	110 (4.33)	32 (1.26)	M30x2	40 (1.57)	50 (1.97)	67 (2.64)	42 (93)

1 Male rod clevis

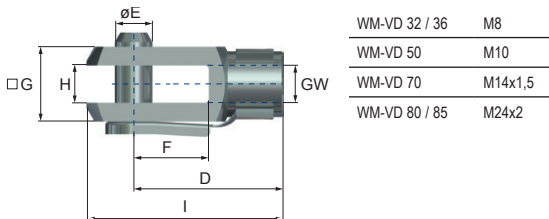


2 Angle joint (DIN 71802)



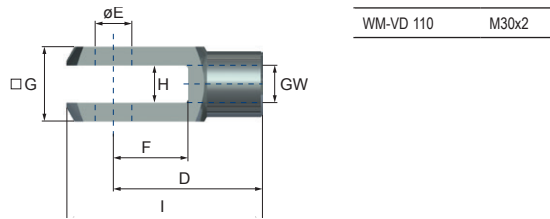
	Force	
WM-VD 32 / 36	1.230 N	276.52 lbs
WM-VD 50	1.900 N	427.14 lbs
WM-VD 70	3.200 N	719.39 lbs

3 Female rod clevis (DIN 71752)



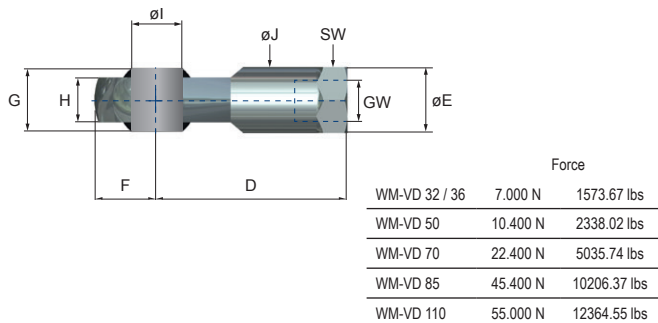
WM-VD 32 / 36	M8
WM-VD 50	M10
WM-VD 70	M14x1,5
WM-VD 80 / 85	M24x2

3 Female rod clevis (DIN 71752)



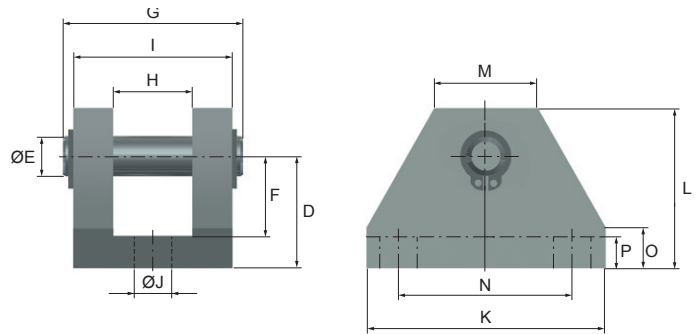
WM-VD 110	M30x2
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4 Spherical end bearing (DIN 648, Series K, Series E on enquiry)



	Force	
WM-VD 32 / 36	7.000 N	1573.67 lbs
WM-VD 50	10.400 N	2338.02 lbs
WM-VD 70	22.400 N	5035.74 lbs
WM-VD 85	45.400 N	10206.37 lbs
WM-VD 110	55.000 N	12364.55 lbs

5 Clevis flange



only use in combination with spherical end bearing (4)

DIMENSIONS

	GW* / GW1	D	øE	F	G	H	I	SW	
									mm (inch)
1	WM-VD 32 / 36	M8	19 (0.75)	14 (0.55)	12 (0.47)	8,1 (0.32)	10 (0.39)	7 (0.28)	-
	WM-VD 50	M10	27 (1.06)	18 (0.71)	12 (0.47)	8,1 (0.32)	10 (0.39)	9 (0.35)	-
	WM-VD 70	M14x1,5	40 (1.57)	25 (0.98)	21 (0.83)	14,1 (0.56)	14 (0.55)	12,5 (0.49)	-
	WM-VD 80 / 85	M24x2	60 (2.36)	40 (1.57)	35 (1.38)	25 (0.98)	25 (0.98)	20 (0.79)	-
	WM-VD 110	M30x2	80 (3.15)	55 (2.17)	45 (1.77)	30 (1.18)	37 (1.46)	27,5 (1.08)	-
	2	WM-VD 32 / 36	M8	30 (1.18)	13 (0.51)	13 (0.51)	16 (0.63)	20 (0.79)	-
WM-VD 50		M10	35 (1.38)	16 (0.63)	16 (0.63)	19 (0.75)	24 (0.94)	-	13 (0.51)
WM-VD 70		M14x1,5	45 (1.77)	22 (0.87)	20 (0.79)	28 (1.1)	30 (1.18)	-	16 (0.63)
3	WM-VD 32 / 36	M8	32 (1.26)	8 (0.31)	16 (0.63)	16 (0.63)	8 (0.31)	42 (1.65)	-
	WM-VD 50	M10	40 (1.57)	10 (0.39)	20 (0.79)	20 (0.79)	10 (0.39)	52 (2.05)	-
	WM-VD 70	M14x1,5	56 (2.2)	14 (0.55)	27 (1.06)	27 (1.06)	14 (0.55)	72 (2.83)	-
	WM-VD 80 / 85	M24x2	100 (3.94)	25 (0.98)	50 (1.97)	50 (1.97)	25 (0.98)	132 (5.2)	-
	WM-VD 110	M30x2	120 (4.72)	30 (1.18)	60 (2.36)	60 (2.36)	30 (1.18)	160 (6.3)	-

	GW*	D	øE	F	G	H	I	J	SW	
										mm (inch)
4	WM-VD 32 / 36	M8	36 (1.42)	16 (0.63)	12 (0.47)	12 (0.47)	9 (0.35)	8 (0.31)	12,5 (0.49)	13 (0.51)
	WM-VD 50	M10	43 (1.69)	19 (0.75)	14 (0.55)	14 (0.55)	10,5 (0.41)	10 (0.39)	15 (0.59)	17 (0.67)
	WM-VD 70	M14x1,5	57 (2.24)	26 (1.02)	18 (0.71)	19 (0.75)	13 (0.51)	14 (0.55)	20 (0.79)	22 (0.87)
	WM-VD 80 / 85	M24x2	94 (3.7)	42 (1.65)	30 (1.18)	31 (1.22)	22 (0.87)	25 (0.98)	33,5 (1.32)	36 (1.42)
	WM-VD 110	M30x2	110 (4.33)	55 (2.17)	35,5 (1.4)	37 (1.46)	25 (0.98)	30 (1.18)	40 (1.57)	41 (1.61)
	5	WM-VD 50	M10	28 (1.1)	10 (0.39)	20 (0.79)	50 (1.97)	20 (0.79)	40 (1.57)	8,5 (0.33)
WM-VD 70		M14x1,5	28 (1.1)	14 (0.55)	20 (0.79)	44 (1.73)	20 (0.79)	40 (1.57)	8,5 (0.33)	-
WM-VD 80 / 85		M24x2	45 (1.77)	25 (0.98)	33 (1.3)	70 (2.76)	32 (1.26)	65 (2.56)	13 (0.51)	-

	GW*	K	L	M	N	O	P	
								mm (inch)
5	WM-VD 50	M10	60 (2.36)	40 (1.57)	26 (1.02)	46 (1.81)	10 (0.39)	8 (0.31)
	WM-VD 70	M14x1,5	60 (2.36)	40 (1.57)	26 (1.02)	46 (1.81)	10 (0.39)	8 (0.31)
	WM-VD 80 / 85	M24x2	90 (3.54)	65 (2.56)	40 (1.57)	70 (2.76)	20 (0.79)	12 (0.47)

Double-Acting Speed Controls

WM-VD 80



FEATURES

Precise adjustment in Push- and Pull direction

Continuous adjustment over the entire stroke

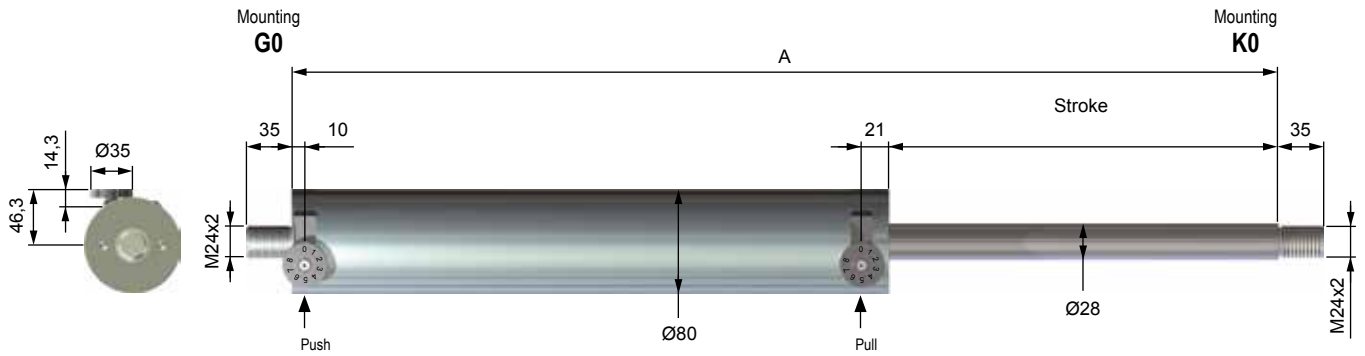
Deceleration characteristic Double-acting

Coating Housing: painted

Material Piston rod: hard-chrome plated

Temperature -20°C - +80°C

RoHS - conform Directive 2002/95/EC



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PERFORMANCE

	Stroke	Pull	Push	Pull - Push	Speed rates	A	Weight
WM-VD 80 - 100	100 (3.94)	20000 (88964)	20000 (88964)	150 (667.23)	0,05 - 40 (0.16 - 132)	360 (14.17)	7,0 (15.43)
WM-VD 80 - 150	150 (5.91)	20000 (88964)	20000 (88964)	150 (667.23)	0,05 - 40 (0.16 - 132)	460 (18.11)	8,3 (18.30)
WM-VD 80 - 200	200 (7.87)	20000 (88964)	20000 (88964)	150 (667.23)	0,05 - 40 (0.16 - 132)	560 (22.05)	9,6 (21.16)
WM-VD 80 - 300	300 (11.81)	20000 (88964)	20000 (88964)	150 (667.23)	0,05 - 40 (0.16 - 132)	760 (29.92)	12,15 (26.79)
WM-VD 80 - 400	400 (15.75)	20000 (88964)	15000 (66723)	150 (667.23)	0,05 - 40 (0.16 - 132)	960 (37.8)	14,71 (32.43)
WM-VD 80 - 500	500 (19.69)	20000 (88964)	15000 (66723)	150 (667.23)	0,05 - 40 (0.16 - 132)	1160 (45.67)	17,27 (38.07)

Ordering Example

WM-VD 80-100-K3G4-C	
WM	Weforma
VD	Speed control, double-acting
80	Size
100	Stroke
K3	Piston rod - Female rod clevis
G4	Housing - Spherical end bearing
C	Type of deceleration: A=push, B=pull, C=push and pull