

Deceleration cylinder

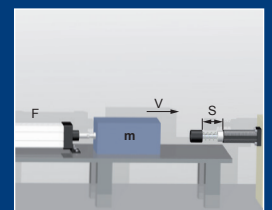
WM-ZG 0,6

WM-ZG 0,8

WM-ZG 1



2D / 3D CAD
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Features

Design:

- Flexibility relating to Stroke, Deceleration Characteristic

Position of installation:

- Any position

RoHS- conform:

- Directive 2002/95/EC

Temperature:

- Standard: -20°C - +80°C
- Low-temperature: -50°C - +60°C
- High-temperature: 0°C - +120°C

Deceleration Characteristic:

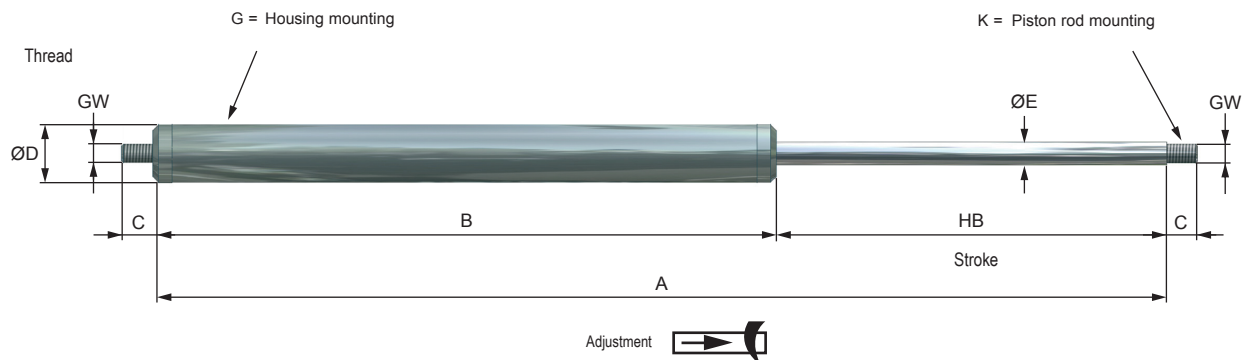
- adjustable
- Push, Pull , Push + Pull

Extended Life Time:

- Special Seals + Oils

Surface protection:

- Housing: Zinc Plated
- Piston rod ZG 0,6 and 0,8 stainless steel
- Piston rod ZG 1 hard-chrome plated

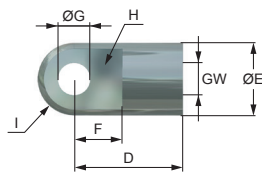


Design ZG without return stroke with volume compensation of the piston rod through floating piston. Return force: see table
Installation position: any position

PERFORMANCE

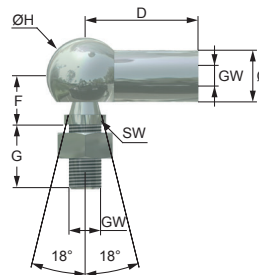
	Stroke	Max. compression force	Version ZG		Return force	C	ø D	ø E	GW	Weight (ZG)
			A	B						
			mm	mm						
WM-ZG 0,6-10	10	150	70	60	10	5	10	3	M 3,5	30
WM-ZG 0,6-20	20	150	90	70	10	5	10	3	M 3,5	35
WM-ZG 0,6-30	30	150	110	80	10	5	10	3	M 3,5	40
WM-ZG 0,6-40	40	150	132	92	10	5	10	3	M 3,5	46
WM-ZG 0,6-50	50	150	155	105	10	5	10	3	M 3,5	52
WM-ZG 0,6-60	60	150	177	117	10	5	10	3	M 3,5	58
WM-ZG 0,6-70	70	150	200	130	10	5	10	3	M 3,5	63
WM-ZG 0,6-80	80	150	223	143	10	5	10	3	M 3,5	69
WM-ZG 0,8-10	10	200	65	55	15	5	12	4	M 3,5	35
WM-ZG 0,8-20	20	200	88	68	15	5	12	4	M 3,5	40
WM-ZG 0,8-30	30	200	111	81	15	5	12	4	M 3,5	45
WM-ZG 0,8-40	40	200	134	94	15	5	12	4	M 3,5	51
WM-ZG 0,8-50	50	200	158	108	15	5	12	4	M 3,5	57
WM-ZG 0,8-60	60	200	181	121	15	5	12	4	M 3,5	63
WM-ZG 0,8-70	70	200	204	134	15	5	12	4	M 3,5	68
WM-ZG 0,8-80	80	200	227	147	15	5	12	4	M 3,5	74
WM-ZG 1-050	50	1500	210	160	30	8	15	6	M 5	130
WM-ZG 1-100	100	1500	310	210	30	8	15	6	M 5	165
WM-ZG 1-150	150	1500	420	270	30	8	15	6	M 5	200
WM-ZG 1-200	200	1500	520	320	30	8	15	6	M 5	270

1 Male rod clevis



1	WM-ZG 0,6	M 3,5	D	ØE	F	G	H	I
			mm	mm	mm	mm	mm	mm
	WM-ZG 0,8	M 3,5	12	8	8	4,1	4	4
	WM-ZG 1	M 5	16	12	12	6,1	8	6

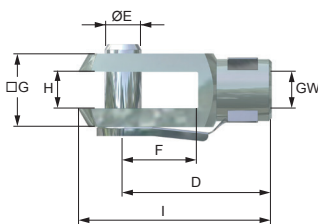
2 Angle joint (DIN 71802)



2	WM-ZG 0,6	M 3,5	D	ØE	F	G	H	SW
			mm	mm	mm	mm	mm	mm
	WM-ZG 0,8	M 3,5	22	8	9	10,2	13	7
	WM-ZG 1	M 5	22	8	9	10	13	7

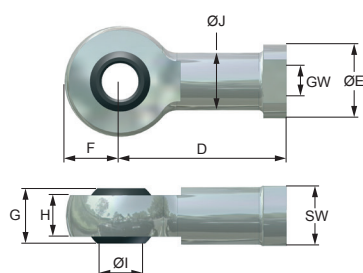
	Force
WM-ZG 0,6 / 0,8	250 N
WM-ZG 1	500 N
WM-ZG 2	1.230 N
WM-ZG 3	1.900 N
WM-ZG 5	3.200 N

3 Female rod clevis (DIN 71752)



3	WM-ZG 0,6	M 3,5	D	ØE	F	G	H	I
			mm	mm	mm	mm	mm	mm
	WM-ZG 0,8	M 3,5	16	4	8	8	4	21
	WM-ZG 1	M 5	20	5	9	10	5	26

4 Spherical end bearing (DIN 648, Series K)

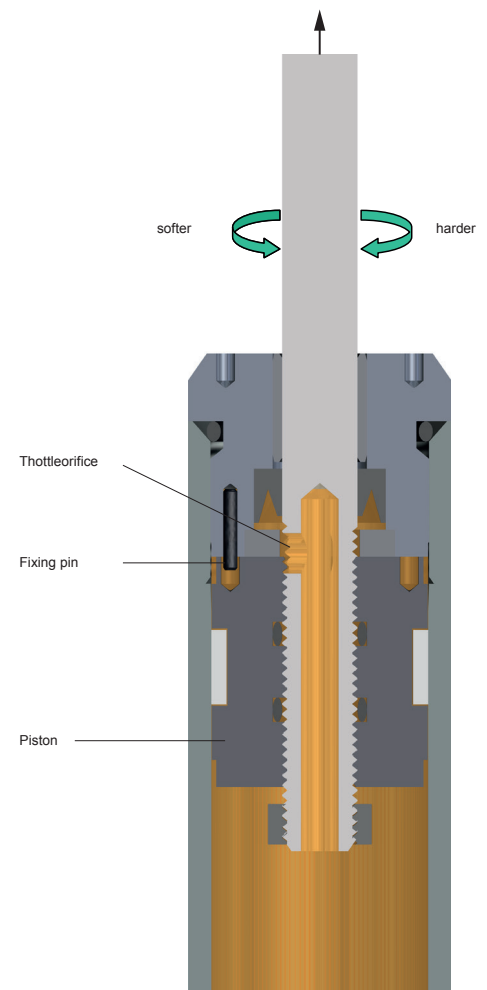


4	WM-ZG 0,6	M 3,5	D	ØE	F	G	H	I	J	SW
			mm	mm	mm	mm	mm	mm	mm	mm
	WM-ZG 0,8	M 3,5	21	6,5	7	6	4,5	3	5	5,5
	WM-ZG 1	M 5	27	11	9	8	6	5	9	9

Ordering Information	
WM-ZG 1-050-K3G4-C	
WM	Weforma
ZG	Deceleration cylinder with volume compensation of the piston rod
1	Diameter: 15 mm
050	Stroke: 50 mm
K3	Piston rod mounting: female rod clevis
G4	Housing mounting: Spherical end bearing
C	Deceleration Characteristic: A=push, B=pull, C=push + pull

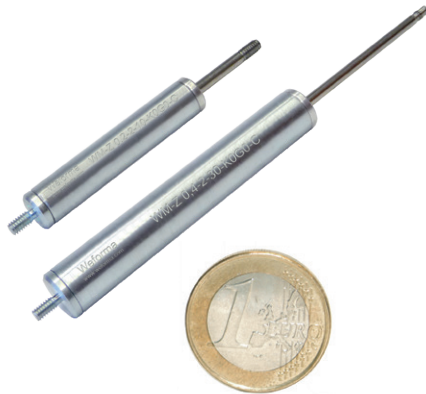
Adjustment

1. Pull piston rod to the end position and thereby turn slightly until the locking bolt clicks into place. The piston is now fixed.
By turning the piston rod change the Cross section of the throttle bores.
2. Damping:
 - harder: turn the piston rod clockwise
 - softer: turn the piston rod anti-clockwise
 - Exception: WM-ZG1-B (Zug) - Dämpfung umgekehrt einstellen



Deceleration Cylinders

WM-Z 0,1 - 1,0 / WM-ZL



WM-Z 0,1 - 0,4

Flexibility relating to stroke, deceleration characteristic Self-adjusting within performance range

Surface protection	Housing: Zinc Plated Piston rod: stainless steel
Mounting	Any position Recommendation: Vertical with the piston rod down
Extended Life Time	Special Seals + Oils
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/EC

WM-Z / ZG 0,6 - 1,0

Flexibility relating to stroke, deceleration characteristic

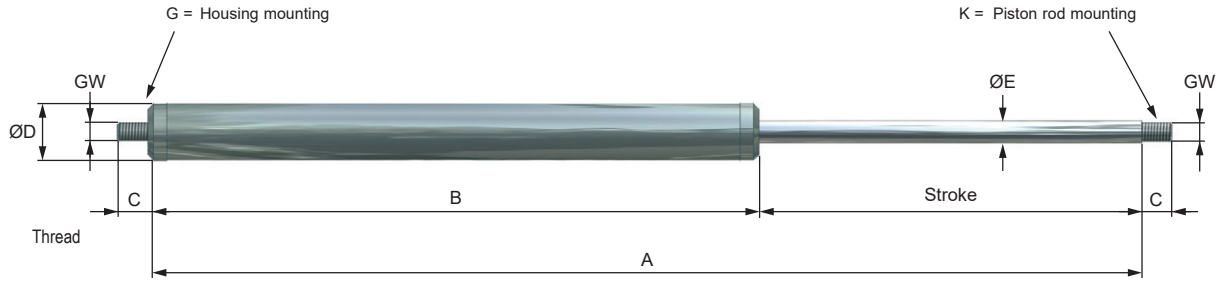
Surface protection	Housing: zinc plated
Mounting	WM-Z: vertical +/- 30° WM-ZG: any position Recommendation: vertical with the piston rod down
Extended Life Time	Special Seals + Oils
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/EC

WM-ZL

Without free travel Deceleration	Mounting any position Adjustable, optional: non adjustable Push, Pull, Push + Pull
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Surface protection	Housing: zinc plated
Extended Life Time	Special Seals + Oils
Temperature	-20°C - +80°C (-4°F - +176°F)
RoHS compliant	Directive 2002/95/EC

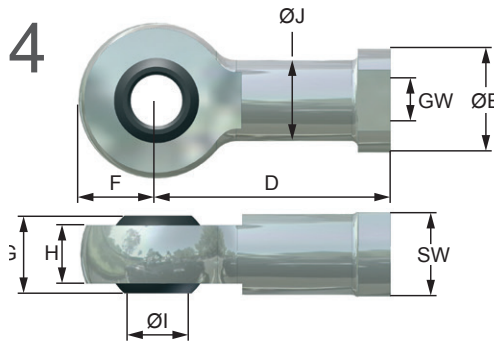
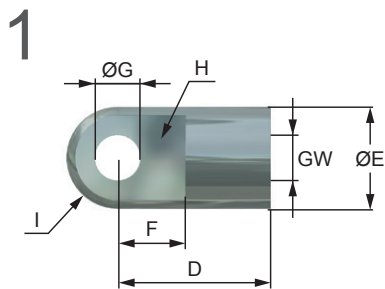




DIMENSIONS

	Stroke	Max. compression force	v max*			A	B	C	øD	øE	GW	Weight
			-2	-4	-6							
	mm (inch)	N (lbs)	m/s (ft/s)	m/s (ft/s)	m/s (ft/s)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)		kg (lbs)
WM-Z 0,1-10	10 (0.39)	25 (5.62)	0,4 (25)	0,25 (1.31)	0,1 (0.82)	37 (0.33)	27 (1.46)	3 (1.06)	5 (0.12)	1,5 (0.2)	M1,4	0,004 (0.01)
WM-Z 0,1-20	20 (0.79)	25 (5.62)	0,4 (25)	0,25 (1.31)	0,1 (0.82)	57 (0.33)	37 (2.24)	3 (1.46)	5 (0.12)	1,5 (0.2)	M1,4	0,005 (0.01)
WM-Z 0,1-30	30 (1.18)	25 (5.62)	0,4 (25)	0,25 (1.31)	0,1 (0.82)	77 (0.33)	47 (3.03)	3 (1.85)	5 (0.12)	1,5 (0.2)	M1,4	0,006 (0.01)
WM-Z 0,1-40	40 (1.57)	25 (5.62)	0,4 (25)	0,25 (1.31)	0,1 (0.82)	97 (0.33)	57 (3.82)	3 (2.24)	5 (0.12)	1,5 (0.2)	M1,4	0,007 (0.02)
WM-Z 0,2-10	10 (0.39)	60 (13.49)	0,4 (60)	0,25 (1.31)	0,1 (0.82)	41 (0.33)	31 (1.61)	3,5 (1.22)	6 (0.14)	2 (0.24)	M2	0,004 (0.01)
WM-Z 0,2-20	20 (0.79)	60 (13.49)	0,4 (60)	0,25 (1.31)	0,1 (0.82)	61 (0.33)	41 (2.4)	3,5 (1.61)	6 (0.14)	2 (0.24)	M2	0,006 (0.01)
WM-Z 0,2-30	30 (1.18)	60 (13.49)	0,4 (60)	0,25 (1.31)	0,1 (0.82)	81 (0.33)	51 (3.19)	3,5 (2.01)	6 (0.14)	2 (0.24)	M2	0,008 (0.02)
WM-Z 0,2-40	40 (1.57)	60 (13.49)	0,4 (60)	0,25 (1.31)	0,1 (0.82)	101 (0.33)	61 (3.98)	3,5 (2.4)	6 (0.14)	2 (0.24)	M2	0,01 (0.02)
WM-Z 0,4-10	10 (0.39)	115 (25.85)	0,4 (115)	0,25 (1.31)	0,1 (0.82)	41 (0.33)	31 (1.61)	3,5 (1.22)	8 (0.14)	2 (0.31)	M2	0,006 (0.01)
WM-Z 0,4-20	20 (0.79)	115 (25.85)	0,4 (115)	0,25 (1.31)	0,1 (0.82)	61 (0.33)	41 (2.4)	3,5 (1.61)	8 (0.14)	2 (0.31)	M2	0,008 (0.02)
WM-Z 0,4-30	30 (1.18)	115 (25.85)	0,4 (115)	0,25 (1.31)	0,1 (0.82)	81 (0.33)	51 (3.19)	3,5 (2.01)	8 (0.14)	2 (0.31)	M2	0,01 (0.02)
WM-Z 0,4-40	40 (1.57)	115 (25.85)	0,4 (115)	0,25 (1.31)	0,1 (0.82)	101 (0.33)	61 (3.98)	3,5 (2.4)	8 (0.14)	2 (0.31)	M2	0,012 (0.03)

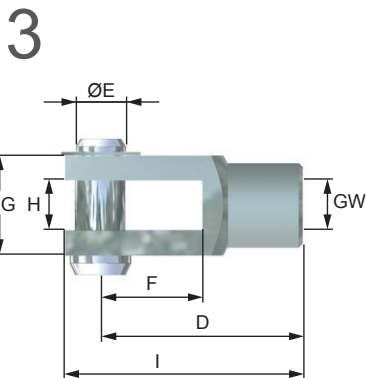
*Max. compression force at max. speed



Ordering Information

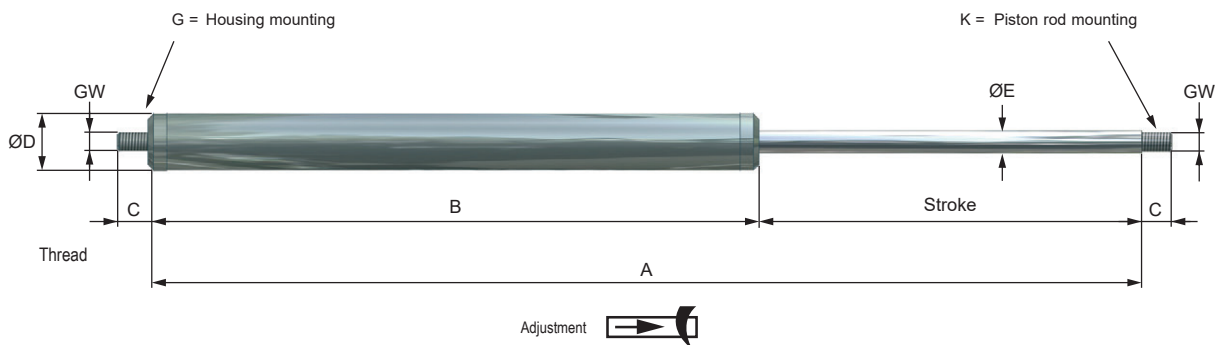
WM-Z 0,2-20-6-K3G1-C

- WM Weforma
- Z Deceleration cylinder (Standard)
- 0,2 Size
- 20 Stroke
- 6 Hardness Level
- K3 Piston rod mounting: female rod clevis
- G1 Housing mounting: male rod clevis
- C Type of deceleration: C=push and pull



	GW	D	øE	F	G	H	I	J	SW	
										mm (inch)
1	WM-Z 0,1	M1,4	5 (0.2)	3 (0.12)	3 (0.12)	1,6 (0.06)	2,4 (0.09)	1,5 (0.06)	-	-
	WM-Z 0,2	M2	6 (0.24)	4 (0.16)	4 (0.16)	2,1 (0.08)	3 (0.12)	2 (0.08)	-	-
	WM-Z 0,4	M2	6 (0.24)	4 (0.16)	4 (0.16)	2,1 (0.08)	3 (0.12)	2 (0.08)	-	-
3	WM-Z 0,1	M1,4	7,5 (0.3)	1,5 (0.06)	3,5 (0.14)	4,4 (0.17)	2,5 (0.1)	9 (0.35)	-	-
	WM-Z 0,2	M2	8 (0.31)	2 (0.08)	4 (0.16)	5,4 (0.21)	3,1 (0.12)	10 (0.39)	-	-
	WM-Z 0,4	M2	8 (0.31)	2 (0.08)	4 (0.16)	5,4 (0.21)	3,1 (0.12)	10 (0.39)	-	-
4	WM-Z 0,1	M1,4	-	-	-	-	-	-	-	-
	WM-Z 0,2	M2	16 (0.63)	4,5 (0.18)	4,5 (0.18)	4,5 (0.18)	3,6 (0.14)	2 (0.08)	3,8 (0.15)	4 (0.16)
	WM-Z 0,4	M2	16 (0.63)	4,5 (0.18)	4,5 (0.18)	4,5 (0.18)	3,6 (0.14)	2 (0.08)	3,8 (0.15)	4 (0.16)

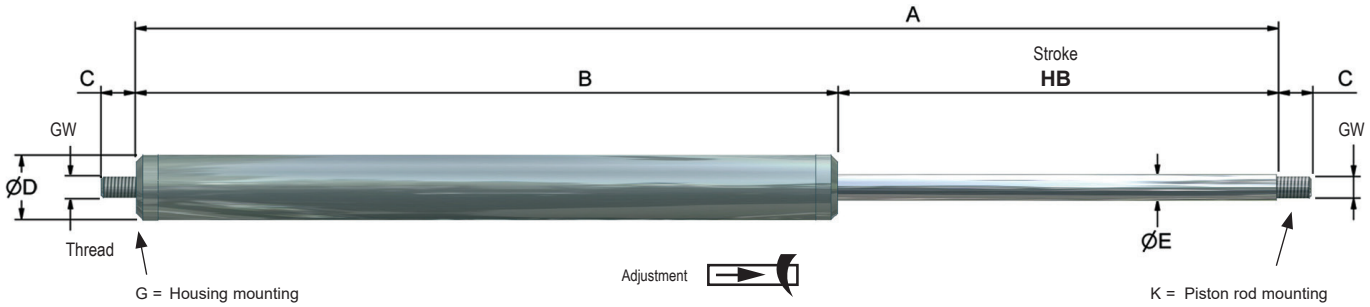
WM-Z / ZG 0,6 - 1,0



20% of the stroke without deceleration for the standard models (WM-Z).
 Design ZG without return stroke with volume compensation of piston rod through floating piston. Return force, see table
 Installation position: any position

PERFORMANCE

	Stroke mm (inch)	Max. compression force N (lbs)	Standard version		Version		Return force max. N (lbs)	Stroke			GW	Weight (Z) kg (lbs)	Weight (ZG) kg (lbs)
			A	B	A	B		C	Ø D	Ø E			
			mm (inch)	mm (inch)	mm (inch)	mm (inch)		mm (inch)	mm (inch)	mm (inch)			
WM-Z 0,6-10	10 (0.39)	150 (33.72)	51 (2.01)	41 (1.61)	70 (2.76)	60 (2.36)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,025 (0.06)	0,03 (0.07)
WM-Z 0,6-20	20 (0.79)	150 (33.72)	71 (2.8)	51 (2.01)	90 (3.54)	70 (2.76)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,03 (0.07)	0,035 (0.08)
WM-Z 0,6-30	30 (1.18)	150 (33.72)	91 (3.58)	61 (2.4)	110 (4.33)	80 (3.15)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,035 (0.08)	0,04 (0.09)
WM-Z 0,6-40	40 (1.57)	150 (33.72)	113 (4.45)	73 (2.87)	132 (5.2)	92 (3.62)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,041 (0.09)	0,046 (0.1)
WM-Z 0,6-50	50 (1.97)	150 (33.72)	135 (5.31)	85 (3.35)	155 (6.1)	105 (4.13)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,047 (0.1)	0,052 (0.11)
WM-Z 0,6-60	60 (2.36)	150 (33.72)	156 (6.14)	96 (3.78)	177 (6.97)	117 (4.61)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,053 (0.12)	0,058 (0.13)
WM-Z 0,6-70	70 (2.76)	150 (33.72)	178 (7.01)	108 (4.25)	200 (7.87)	130 (5.12)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,058 (0.13)	0,063 (0.14)
WM-Z 0,6-80	80 (3.15)	150 (33.72)	200 (7.87)	120 (4.72)	223 (8.78)	143 (5.63)	25 (5.62)	5 (0.2)	10 (0.39)	3 (0.12)	M 3,5	0,064 (0.14)	0,069 (0.15)
WM-Z 0,8-10	10 (0.39)	200 (44.96)	55 (2.17)	45 (1.77)	65 (2.56)	55 (2.17)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,03 (0.07)	0,035 (0.08)
WM-Z 0,8-20	20 (0.79)	200 (44.96)	75 (2.95)	55 (2.17)	88 (3.46)	68 (2.68)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,035 (0.08)	0,04 (0.09)
WM-Z 0,8-30	30 (1.18)	200 (44.96)	95 (3.74)	65 (2.56)	111 (4.37)	81 (3.19)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,04 (0.09)	0,045 (0.1)
WM-Z 0,8-40	40 (1.57)	200 (44.96)	115 (4.53)	75 (2.95)	134 (5.28)	94 (3.7)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,046 (0.1)	0,051 (0.11)
WM-Z 0,8-50	50 (1.97)	200 (44.96)	135 (5.31)	85 (3.35)	158 (6.22)	108 (4.25)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,052 (0.11)	0,057 (0.13)
WM-Z 0,8-60	60 (2.36)	200 (44.96)	155 (6.1)	95 (3.74)	181 (7.13)	121 (4.76)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,058 (0.13)	0,063 (0.14)
WM-Z 0,8-70	70 (2.76)	200 (44.96)	175 (6.89)	105 (4.13)	204 (8.03)	134 (5.28)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,063 (0.14)	0,068 (0.15)
WM-Z 0,8-80	80 (3.15)	200 (44.96)	195 (7.68)	115 (4.53)	227 (8.94)	147 (5.79)	25 (5.62)	5 (0.2)	12 (0.47)	4 (0.16)	M 3,5	0,069 (0.15)	0,074 (0.16)
WM-Z 1-050	50 (1.97)	1500 (337.21)	160 (6.3)	110 (4.33)	210 (8.27)	160 (6.3)	50 (11.24)	8 (0.31)	15 (0.59)	6 (0.24)	M 5	0,1 (0.22)	0,13 (0.29)
WM-Z 1-100	100 (3.94)	1500 (337.21)	260 (10.24)	160 (6.3)	310 (12.2)	210 (8.27)	50 (11.24)	8 (0.31)	15 (0.59)	6 (0.24)	M 5	0,133 (0.29)	0,165 (0.36)
WM-Z 1-150	150 (5.91)	1500 (337.21)	360 (14.17)	210 (8.27)	420 (16.54)	270 (10.63)	50 (11.24)	8 (0.31)	15 (0.59)	6 (0.24)	M 5	0,171 (0.38)	0,2 (0.44)
WM-Z 1-200	200 (7.87)	1500 (337.21)	470 (18.5)	270 (10.63)	520 (20.47)	320 (12.6)	50 (11.24)	8 (0.31)	15 (0.59)	6 (0.24)	M 5	0,232 (0.51)	0,27 (0.6)



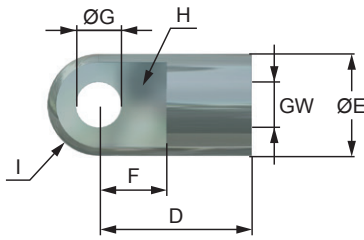
20% of the stroke without deceleration for the standard models (WM-Z).
 Design ZG without return stroke with volume compensation of piston rod through floating piston. Return force, see table
 Installation position: any position

PERFORMANCE

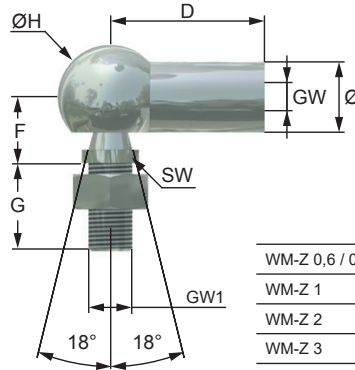
	Stroke	Max. compression force	Standard version		Version		Return force	C	ø D	ø E	GW	Weight (Z)	Weight (ZG)
			A	B	A	B							
	mm (inch)	N (lbs)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	max. N (max. lbs)	mm (inch)	mm (inch)	mm (inch)		kg (lbs)	kg (lbs)
WM-Z 2-050	50 (1.97)	3100 (696.91)	160 (6.3)	110 (4.33)	240 (9.45)	190 (7.48)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,3 (0.66)	0,5 (1.1)
WM-Z 2-100	100 (3.94)	3100 (696.91)	260 (10.24)	160 (6.3)	340 (13.39)	240 (9.45)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,4 (0.88)	0,6 (1.32)
WM-Z 2-150	150 (5.91)	3100 (696.91)	360 (14.17)	210 (8.27)	440 (17.32)	290 (11.42)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,5 (1.1)	0,7 (1.54)
WM-Z 2-200	200 (7.87)	3100 (696.91)	460 (18.11)	260 (10.24)	540 (21.26)	340 (13.39)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,6 (1.32)	0,8 (1.76)
WM-Z 2-250	250 (9.84)	3100 (696.91)	560 (22.05)	310 (12.2)	640 (25.2)	390 (15.35)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,7 (1.54)	0,9 (1.98)
WM-Z 2-300	300 (11.81)	2800 (629.47)	660 (25.98)	360 (14.17)	740 (29.13)	440 (17.32)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,8 (1.76)	1 (2.2)
WM-Z 2-350	350 (13.78)	2300 (517.06)	760 (29.92)	410 (16.14)	840 (33.07)	490 (19.29)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	0,9 (1.98)	1 (2.2)
WM-Z 2-400	400 (15.75)	1800 (404.66)	860 (33.86)	460 (18.11)	940 (37.01)	540 (21.26)	100 (22.48)	10 (0.39)	28 (1.1)	8 (0.31)	M 8	1 (2.2)	1,2 (2.65)
WM-Z 3-100	100 (3.94)	10000 (2248.09)	275 (10.83)	175 (6.89)	355 (13.98)	255 (10.04)	200 (44.96)	10 (0.39)	35 (1.38)	14 (0.55)	M 10	0,8 (1.76)	1,4 (3.09)
WM-Z 3-200	200 (7.87)	10000 (2248.09)	475 (18.7)	275 (10.83)	555 (21.85)	355 (13.98)	200 (44.96)	10 (0.39)	35 (1.38)	14 (0.55)	M 10	1,1 (2.43)	1,7 (3.75)
WM-Z 3-300	300 (11.81)	10000 (2248.09)	675 (26.57)	375 (14.76)	755 (29.72)	455 (17.91)	200 (44.96)	10 (0.39)	35 (1.38)	14 (0.55)	M 10	1,4 (3.09)	2 (4.41)
WM-Z 3-400	400 (15.75)	10000 (2248.09)	875 (34.45)	475 (18.7)	955 (37.6)	555 (21.85)	200 (44.96)	10 (0.39)	35 (1.38)	14 (0.55)	M 10	1,7 (3.75)	2,2 (4.85)
WM-Z 3-500	500 (19.69)	8500 (1910.88)	1075 (42.32)	575 (22.64)	1155 (45.47)	655 (25.79)	200 (44.96)	10 (0.39)	35 (1.38)	14 (0.55)	M 10	2 (4.41)	2,3 (5.07)
WM-Z 5-100	100 (3.94)	24000 (5395.42)	320 (12.6)	220 (8.66)	420 (16.54)	320 (12.6)	250 (56.2)	25 (0.98)	50 (1.97)	18 (0.71)	M 16	2,4 (5.29)	3,1 (6.83)
WM-Z 5-200	200 (7.87)	24000 (5395.42)	520 (20.47)	320 (12.6)	620 (24.41)	420 (16.54)	250 (56.2)	25 (0.98)	50 (1.97)	18 (0.71)	M 16	3,2 (7.05)	4 (8.82)
WM-Z 5-300	300 (11.81)	24000 (5395.42)	720 (28.35)	420 (16.54)	820 (32.28)	520 (20.47)	250 (56.2)	25 (0.98)	50 (1.97)	18 (0.71)	M 16	4 (8.82)	4,7 (10.36)
WM-Z 5-400	400 (15.75)	24000 (5395.42)	920 (36.22)	520 (20.47)	1020 (40.16)	620 (24.41)	250 (56.2)	25 (0.98)	50 (1.97)	18 (0.71)	M 16	4,7 (10.36)	5,5 (12.13)
WM-Z 5-500	500 (19.69)	22000 (4945.8)	1120 (44.09)	620 (24.41)	1220 (48.03)	720 (28.35)	250 (56.2)	25 (0.98)	50 (1.97)	18 (0.71)	M 16	5,5 (12.13)	6,2 (13.67)
WM-Z 7-100	100 (3.94)	52000 (11690.07)	320 (12.6)	220 (8.66)	470 (18.5)	370 (14.57)	300 (67.44)	35 (1.38)	70 (2.76)	28 (1.1)	M 24x2	4,5 (9.92)	6,6 (14.55)
WM-Z 7-200	200 (7.87)	52000 (11690.07)	520 (20.47)	320 (12.6)	670 (26.38)	470 (18.5)	300 (67.44)	35 (1.38)	70 (2.76)	28 (1.1)	M 24x2	5,8 (12.79)	7,9 (17.42)
WM-Z 7-300	300 (11.81)	52000 (11690.07)	720 (28.35)	420 (16.54)	870 (34.25)	570 (22.44)	300 (67.44)	35 (1.38)	70 (2.76)	28 (1.1)	M 24x2	7,1 (15.65)	9,2 (20.28)
WM-Z 7-400	400 (15.75)	52000 (11690.07)	920 (36.22)	520 (20.47)	1070 (42.13)	670 (26.38)	300 (67.44)	35 (1.38)	70 (2.76)	28 (1.1)	M 24x2	8,4 (18.52)	10,4 (22.93)
WM-Z 7-500	500 (19.69)	50000 (11240.45)	1120 (44.09)	620 (24.41)	1270 (50)	770 (30.31)	300 (67.44)	35 (1.38)	70 (2.76)	28 (1.1)	M 24x2	9,6 (21.16)	11,7 (25.79)

Accessories

1 Male rod clevis

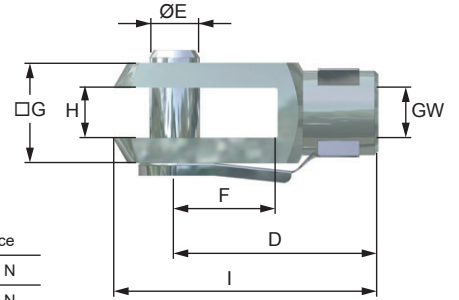


2 Angle joint

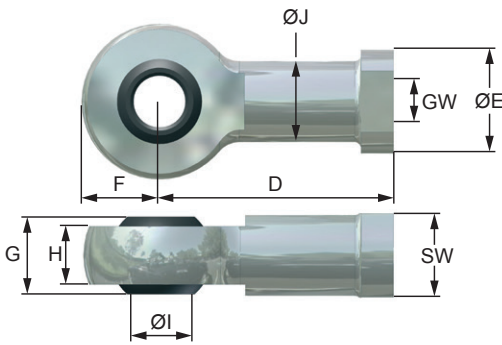


	Force
WM-Z 0,6 / 0,8	250 N
WM-Z 1	500 N
WM-Z 2	1.230 N
WM-Z 3	1.900 N
WM-Z 5	3.200 N

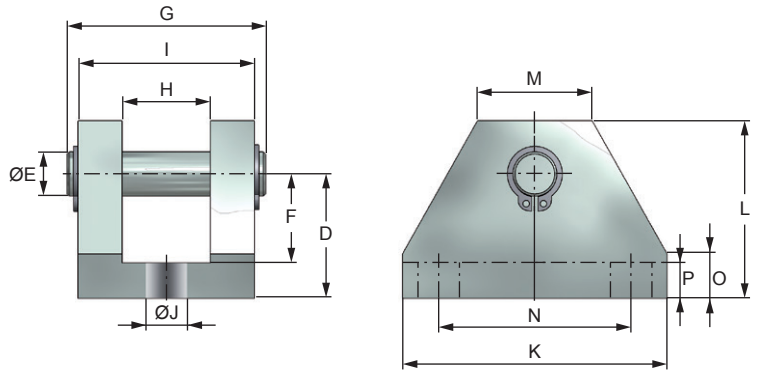
3 Female rod clevis (DIN 71752)



4 Spherical end bearing (DIN 648, Series K / Series E on enquiry)

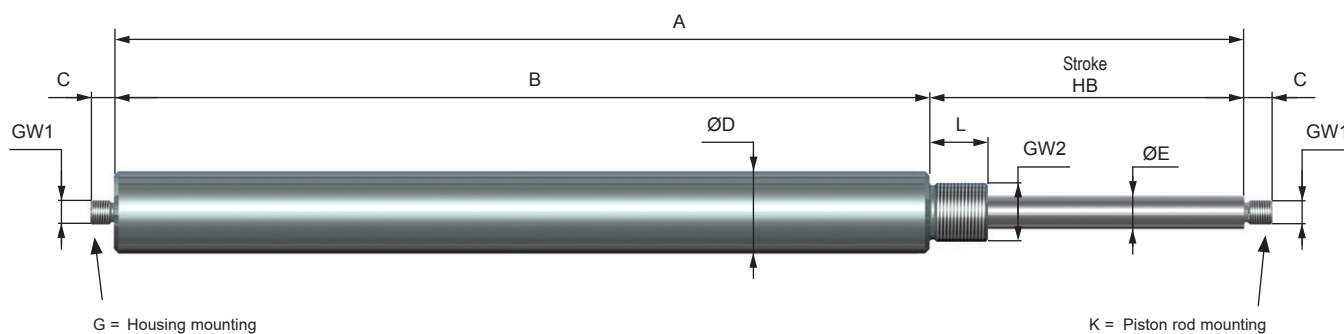


5 Clevis flange only use in combination with spherical end bearing (4)



DIMENSIONS

		GW	D	ØE	F	G	H	I	J	SW	K	L	M	N	O	P
		mm (inch)														
1	WM-Z 0,6	M 3,5	12 (0.47)	8 (0.31)	8 (0.31)	4,1 (0.16)	4 (0.16)	4 (0.16)	-	-	-	-	-	-	-	-
	WM-Z 0,8	M 3,5	12 (0.47)	8 (0.31)	8 (0.31)	4,1 (0.16)	4 (0.16)	4 (0.16)	-	-	-	-	-	-	-	-
	WM-Z 1	M 5	16 (0.63)	12 (0.47)	12 (0.47)	6,1 (0.24)	8 (0.31)	6 (0.24)	-	-	-	-	-	-	-	-
	WM-Z 2	M 8	19 (0.75)	14 (0.55)	12 (0.47)	8,1 (0.32)	10 (0.39)	7 (0.28)	-	-	-	-	-	-	-	-
	WM-Z 3	M 10	27 (1.06)	18 (0.71)	12 (0.47)	8,1 (0.32)	10 (0.39)	9 (0.35)	-	-	-	-	-	-	-	-
2	WM-Z 0,6	M 3,5	22 (0.87)	8 (0.31)	9 (0.35)	10,2 (0.4)	13 (0.51)	18 (0.71)	-	7 (0.28)	-	-	-	-	-	-
	WM-Z 0,8	M 3,5	22 (0.87)	8 (0.31)	9 (0.35)	10,2 (0.4)	13 (0.51)	18 (0.71)	-	7 (0.28)	-	-	-	-	-	-
	WM-Z 1	M 5	22 (0.87)	8 (0.31)	9 (0.35)	10 (0.39)	13 (0.51)	18 (0.71)	-	7 (0.28)	-	-	-	-	-	-
	WM-Z 2	M 8	30 (1.18)	13 (0.51)	13 (0.51)	16 (0.63)	20 (0.79)	18 (0.71)	-	11 (0.43)	-	-	-	-	-	-
	WM-Z 3	M 10	35 (1.38)	16 (0.63)	16 (0.63)	19 (0.75)	24 (0.94)	18 (0.71)	-	13 (0.51)	-	-	-	-	-	-
3	WM-Z 0,6	M 3,5	16 (0.63)	4 (0.16)	8 (0.31)	8 (0.31)	4 (0.16)	21 (0.83)	-	-	-	-	-	-	-	-
	WM-Z 0,8	M 3,5	16 (0.63)	4 (0.16)	8 (0.31)	8 (0.31)	4 (0.16)	21 (0.83)	-	-	-	-	-	-	-	-
	WM-Z 1	M 5	20 (0.79)	5 (0.2)	9 (0.35)	10 (0.39)	5 (0.2)	26 (1.02)	-	-	-	-	-	-	-	-
	WM-Z 2	M 8	32 (1.26)	8 (0.31)	16 (0.63)	16 (0.63)	8 (0.31)	42 (1.65)	-	-	-	-	-	-	-	-
	WM-Z 3	M 10	40 (1.57)	10 (0.39)	20 (0.79)	20 (0.79)	10 (0.39)	52 (2.05)	-	-	-	-	-	-	-	-
	WM-Z 5	M 16	64 (2.52)	16 (0.63)	32 (1.26)	32 (1.26)	16 (0.63)	83 (3.27)	-	-	-	-	-	-	-	-
4	WM-Z 0,6	M 3,5	21 (0.83)	6,5 (0.26)	7 (0.28)	6 (0.24)	4,5 (0.18)	3 (0.12)	5 (0.2)	5,5 (0.22)	-	-	-	-	-	-
	WM-Z 0,8	M 3,5	21 (0.83)	6,5 (0.26)	7 (0.28)	6 (0.24)	4,5 (0.18)	3 (0.12)	5 (0.2)	5,5 (0.22)	-	-	-	-	-	-
	WM-Z 1	M 5	27 (1.06)	11 (0.43)	9 (0.35)	8 (0.31)	6 (0.24)	5 (0.2)	9 (0.35)	9 (0.35)	-	-	-	-	-	-
	WM-Z 2	M 8	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-Z 3	M 10	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-Z 5	M 16	64 (2.52)	27 (1.06)	21 (0.83)	21 (0.83)	15 (0.59)	16 (0.63)	20 (0.79)	22 (0.87)	-	-	-	-	-	-
	WM-Z 7	M 24 x 2	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)	-	-	-	-	-	-
5	WM-Z 3	M 10	28 (1.1)	10 (0.39)	20 (0.79)	50 (1.97)	20 (0.79)	40 (1.57)	8,5 (0.33)	-	60 (2.36)	40 (1.57)	26 (1.02)	46 (1.81)	10 (0.39)	8 (0.31)
	WM-Z 5	M 16	38 (1.5)	16 (0.63)	28 (1.1)	60 (2.36)	26 (1.02)	55 (2.17)	11 (0.43)	-	75 (2.95)	55 (2.17)	30 (1.18)	55 (2.17)	15 (0.59)	10 (0.39)
	WM-Z 7	M 24 x 2	45 (1.77)	25 (0.98)	33 (1.3)	70 (2.76)	32 (1.26)	65 (2.56)	13 (0.51)	-	90 (3.54)	65 (2.56)	40 (1.57)	70 (2.76)	20 (0.79)	12 (0.47)



PERFORMANCE

	Stroke	Max. compression force	Max. compression force (clevis mounting)	A	B	C	Ø D	Ø E	L	GW1	GW2	Weight
	mm (inch)	N (lbs)	N (lbs)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	GW	GW	kg (lbs)
WM-ZL 2-050	50 (1.97)	3100 (696.91)	3100 (696.91)	295 (11.61)	219 (8.62)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	0,7 (1.54)
WM-ZL 2-075	75 (2.95)	3100 (696.91)	3100 (696.91)	370 (14.57)	269 (10.59)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	0,8 (1.76)
WM-ZL 2-100	100 (3.94)	3100 (696.91)	3100 (696.91)	445 (17.52)	319 (12.56)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	0,9 (1.98)
WM-ZL 2-150	150 (5.91)	3100 (696.91)	3100 (696.91)	595 (23.43)	419 (16.5)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	1,2 (2.65)
WM-ZL 2-200	200 (7.87)	3100 (696.91)	3100 (696.91)	745 (29.33)	519 (20.43)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	1,5 (3.31)
WM-ZL 2-250	250 (9.84)	3100 (696.91)	3100 (696.91)	895 (35.24)	619 (24.37)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	1,7 (3.75)
WM-ZL 2-300	300 (11.81)	2800 (629.47)	3100 (696.91)	1035 (40.75)	719 (28.31)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	1,9 (4.19)
WM-ZL 2-350	350 (13.78)	2300 (517.06)	3100 (696.91)	1195 (47.05)	819 (32.24)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	2,2 (4.85)
WM-ZL 2-400	400 (15.75)	1800 (404.66)	3100 (696.91)	1345 (52.95)	919 (36.18)	10 (0.39)	28 (1.1)	8 (0.31)	16 (0.63)	M8	M20x1,5	2,5 (5.51)
WM-ZL 3-100	100 (3.94)	10000 (2248.09)	10000 (2248.09)	485 (19.09)	350 (13.78)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	2,3 (5.07)
WM-ZL 3-150	150 (5.91)	10000 (2248.09)	10000 (2248.09)	635 (25)	450 (17.72)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	2,6 (5.73)
WM-ZL 3-200	200 (7.87)	10000 (2248.09)	10000 (2248.09)	785 (30.91)	550 (21.65)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	3 (6.61)
WM-ZL 3-300	300 (11.81)	10000 (2248.09)	10000 (2248.09)	1085 (42.72)	750 (29.53)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	3,6 (7.94)
WM-ZL 3-400	400 (15.75)	10000 (2248.09)	10000 (2248.09)	1385 (54.53)	950 (37.4)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	4,2 (9.26)
WM-ZL 3-500	500 (19.69)	8500 (1910.88)	10000 (2248.09)	1685 (66.34)	1150 (45.28)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	5 (11.02)
WM-ZL 3-600	600 (23.62)	7200 (1618.62)	9000 (2023.28)	1985 (78.15)	1350 (53.15)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	5,9 (13.01)
WM-ZL 3-700	700 (27.56)	5000 (1124.05)	7000 (1573.66)	2285 (89.96)	1550 (61.02)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	6,8 (14.99)
WM-ZL 3-800	800 (31.5)	4000 (899.24)	5500 (1236.45)	2585 (101.77)	1750 (68.9)	10 (0.39)	35 (1.38)	14 (0.55)	25 (0.98)	M10	M25x1,5	7,4 (16.31)

Accessories Pages 106