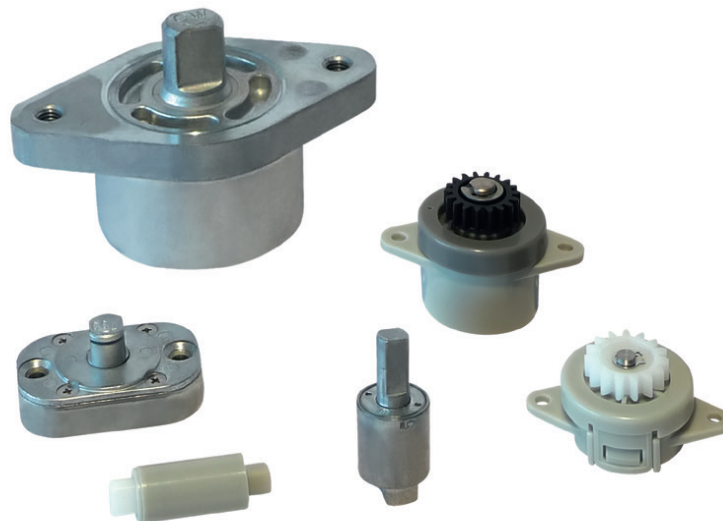
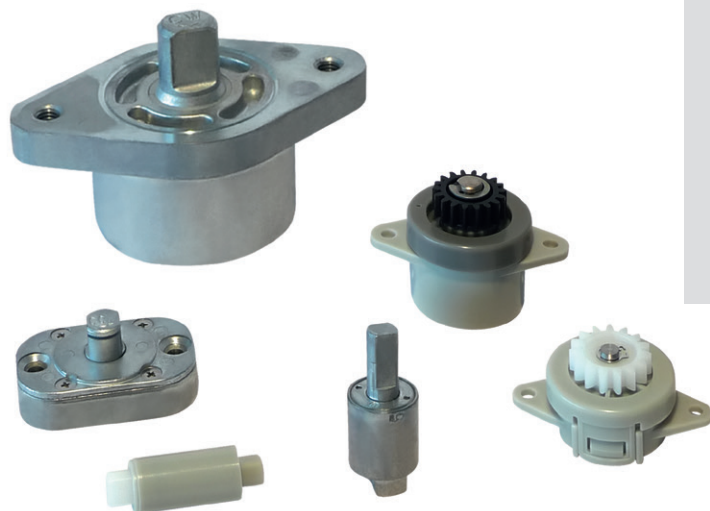


## Rotary Dampers



## Rotary Dampers

# WRD



### Material Torques

Plastic and aluminium die cast  
up to 9 Nm

### Damping

right-turning and left-turning  
fixed setting (WRD 22 / 23 adjustable)

### Temperature

-5°C - +50°C (23°C - +122°C)

### RoHS compliant

Directive 2002/95/EC

### Applications

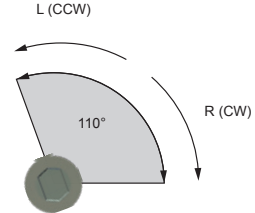
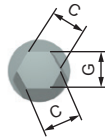
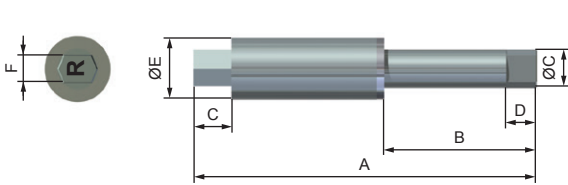
Damping of rotational movements  
of flaps, hoods and lids

## TORQUE

Clockwise	Counter-clockwise	Torque Nm (in lbs)	Opening angle °	Weight g (oz)
WRD 16 - R25	WRD 16 - L25	2,45 (21.68)	110	60 (2.15)
WRD 16 - R40	WRD 16 - L40	3,92 (34.70)		
WRD 18 - R10	WRD 18 - L10	0,98 (8.67)	110	10 (0.35)
WRD 18 - R15	WRD 18 - L15	1,47 (13.01)		
WRD 18 - R20	WRD 18 - L20	1,96 (17.35)	110	30 (1.06)
WRD 19 - R15	WRD 19 - L10	1,47 (13.01)		
WRD 19 - R20	WRD 19 - L20	1,96 (17.35)	110	30 (1.06)
WRD 19 - R25	WRD 19 - L25	2,45 (21.68)		
WRD 19 - R30	WRD 19 - L30	2,94 (26.02)	110	12 (0.42)
WRD 20 - R20	WRD 20 - L20	1,96 (17.35)		
WRD 20 - R25	WRD 20 - L25	2,45 (21.68)	110	12 (0.42)
WRD 20 - R30	WRD 20 - L30	2,94 (26.02)		
WRD 20 - R35	WRD 20 - L35	3,43 (30.36)	110	30 (1.06)
WRD 22 - R13	WRD 22 - L13	0,49 - 1,27 (4.34 - 11.24)		
WRD 22 - R20	WRD 22 - L20	0,98 - 1,96 (8.67 - 17.35)	110	30 (1.06)
WRD 23 - R13	WRD 23 - L13	0,49 - 1,27 (4.34 - 11.24)		
WRD 23 - R20	WRD 23 - L20	0,98 - 1,96 (8.67 - 17.35)	110	200 (7.06)
WRD 40 - R50	WRD 40 - L50	4,9 (43.37)		
WRD 40 - R70	WRD 40 - L70	6,86 (60.72)	110	60 (2.15)
WRD 40 - R90	WRD 40 - L90	8,82 (78.15)		
WRD 60 - R10	WRD 60 - L10	0,98 (8.67)	110	2 (0.07)
WRD 60 - R15	WRD 60 - L15	1,47 (13.01)		
WRD 60 - R20	WRD 60 - L20	1,96 (17.35)	110	22 (0.78)
WRD 73 - R10	WRD 73 - L10	0,10 (0.89)		
WRD 73 - R20	WRD 73 - L20	0,20 (1.77)	180	20 (0.71)
WRD 73 - R30	WRD 73 - L30	0,29 (2.57)		
WRD 100 - R15	WRD 100 - L15	1,5 (13.28)	110	20 (0.71)
WRD 100 - R20	WRD 100 - L20	2,0 (17.70)		
WRD 100 - R25	WRD 100 - L25	2,5 (22.13)	110	20 (0.71)
WRD 100 - R30	WRD 100 - L30	3,0 (26.55)		
WRD 34 - R15	WRD 34 - L15	0,15 (1.33)	180	20 (0.71)
WRD 34 - R30	WRD 34 - L30	0,29 (2.57)		
WRD 34 - R60	WRD 34 - L60	0,59 (5.22)	180	20 (0.71)

Clockwise	Counter-clockwise	Torque Nm (in lbs)	Opening angle °	Weight g (oz)
WRD 58 - R30	WRD 58 - L30	0,3 (2.66)	continuously	40 (1.41)
WRD 58 - R50	WRD 58 - L50	0,5 (4.43)		
WRD 58 - R80	WRD 58 - L80	0,8 (7.08)	continuously	16 (0.56)
WRD 62 - R3	WRD 62 - L3	0,03 (0.27)		
WRD 62 - R6	WRD 62 - L6	0,06 (0.53)	continuously	16 (0.56)
WRD 62 - R9	WRD 62 - L9	0,09 (0.80)		
WRD 62 - R15	WRD 62 - L15	0,15 (1.33)	continuously	8 (0.28)
WRD 62 - R20	WRD 62 - L20	0,20 (1.17)		
WRD 62 - R25	WRD 62 - L25	0,25 (2.21)	continuously	8 (0.28)
WRD 88 - R40	WRD 88 - L40	0,04 (0.35)		
WRD 101 - C25		0,0025 (0.02)	continuously	0,4 (0.01)
WRD 101 - C40		0,004 (0.04)	continuously	0,6 (0.02)
WRD 470-R1	WRD 470-L1	1 (8.85)	continuously	50 (1.76)
WRD 470-R2	WRD 470-L2	2 (17.7)		
WRD 470-C2		2 (17.7)	continuously	50 (1.76)
WRD 470-C3		3 (26.55)		
WRD 470-C4		4 (35.4)	continuously	77 (2.72)
WRD 570-R3	WRD 570-L3	3 (26.55)		
WRD 570-R4	WRD 570-L4	4 (35.4)	continuously	77 (2.72)
WRD 570-R5	WRD 570-L5	5 (44.25)		
WRD 570-R6	WRD 570-L6	6 (53.1)	continuously	77 (2.72)
WRD 570-R7	WRD 570-L7	7 (61.96)		
WRD 570-R8	WRD 570-L8	8 (70.81)	continuously	77 (2.72)
WRD 570-C3		3 (26.55)		
WRD 570-C4		4 (35.4)	continuously	77 (2.72)
WRD 570-C5		5 (44.25)		
WRD 570-C6		6 (53.1)	continuously	77 (2.72)
WRD 570-C7		7 (61.96)		
WRD 570-C8		8 (70.81)	continuously	77 (2.72)

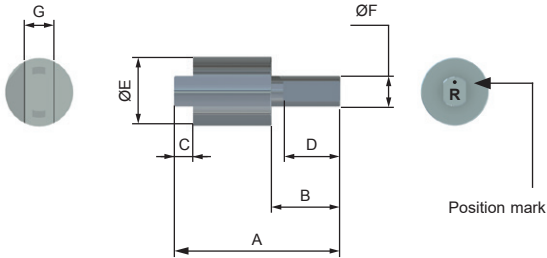
# WRD 16



R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 16 - R25	WRD 16 - L25	2,45 (21.68)	Alu die cast
WRD 16 - R40	WRD 16 - L40	3,92 (34.70)	

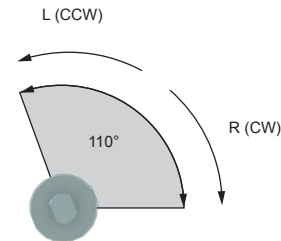
A	B	C	D	E	F	G
7 (0.28)	40 (1.57)	10 (0.39)	8 (0.31)	16,2 (0.64)	7 (0.28)	9 (0.35)

# WRD 18 / 19

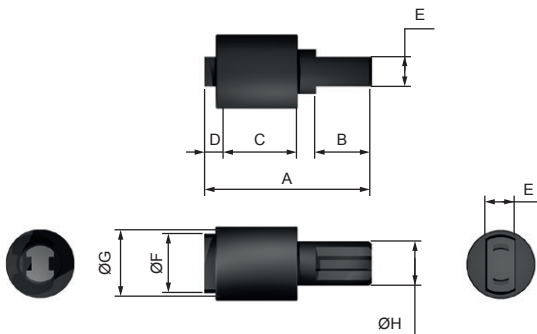


R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 18 - R10	WRD 18 - L10	0,98 (8.67)	Plastic
WRD 18 - R15	WRD 18 - L15	1,47 (13.01)	
WRD 18 - R20	WRD 18 - L20	1,96 (17.35)	
WRD 19 - R15	WRD 19 - L15	1,47 (13.01)	Alu die cast
WRD 19 - R20	WRD 19 - L20	1,96 (17.35)	
WRD 19 - R25	WRD 19 - L25	2,45 (21.68)	
WRD 19 - R30	WRD 19 - L30	2,94 (26.02)	

A	B	C	D	E	F	G
45 / 43 (1.77/1.69)	20 / 18 (0.79/0.71)	5 (0.2)	15 (0.59)	18 (0.71)	12/8 (0.47/0.31)	8 (0.31)

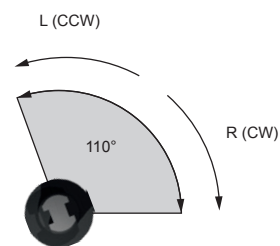


# WRD 20



R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 20 - R20	WRD 20 - L20	1,96 (17.35)	Plastic
WRD 20 - R25	WRD 20 - L25	2,45 (21.68)	
WRD 20 - R30	WRD 20 - L30	2,94 (26.02)	
WRD 20 - R35	WRD 20 - L35	3,43 (30.36)	

A	B	C	D	E	F	G	H
45 (1.77)	15 (0.59)	22 (0.87)	3 (0.12)	8 <sub>-0,2</sub> <sup>0,017</sup> (0.31 <sub>0,017</sub> )	16 (0.63)	20 <sub>-0,2</sub> <sup>0,017</sup> (0.79 <sub>0,017</sub> )	12 <sub>-0,2</sub> <sup>0,017</sup> (0.47 <sub>0,017</sub> )

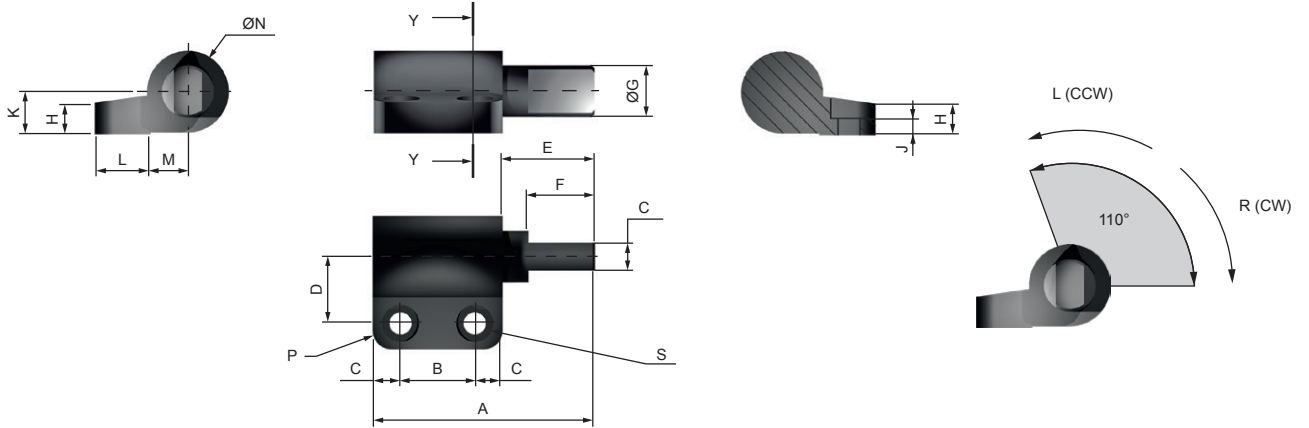


# WRD 22



R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 22 - R13	WRD 22 - L13	0,49 - 1,27 (4,34 - 11,24)	Plastic
WRD 22 - R20	WRD 22 - L20	0,98 - 1,96 (8,67 - 17,35)	

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
60 (2.36)	20 (0.79)	7,5 (0.3)	18 (0.71)	25 (0.98)	18 (0.71)	14 (0.55)	8 (0.31)	3 (0.12)	11,5 (0.45)	15 (0.59)	10 (0.39)	22 (0.87)	R5 (R0,2)	2x Ø6xØ10 (2x Ø0.24xØ0.39)

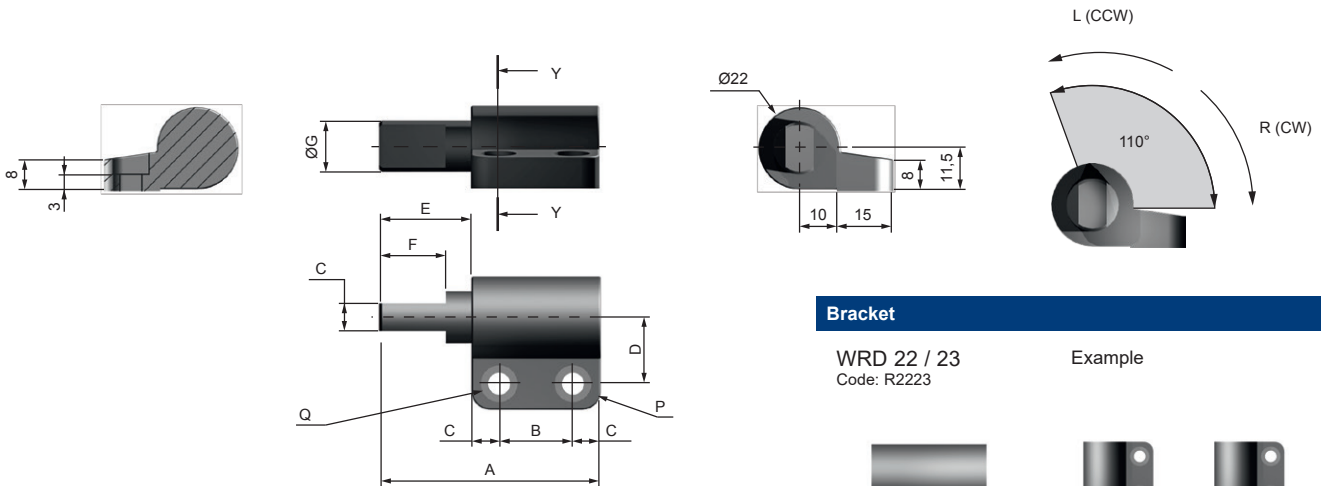


# WRD 23



R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 23 - R13	WRD 23 - L13	0,49 - 1,27 (4,34 - 11,24)	Plastic
WRD 23 - R20	WRD 23 - L20	0,98 - 1,96 (8,67 - 17,35)	

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
60 (2.36)	20 (0.79)	7,5 (0.3)	18 (0.71)	25 (0.98)	18 (0.71)	14 (0.55)	8 (0.31)	3 (0.12)	11,5 (0.45)	15 (0.59)	10 (0.39)	22 (0.87)	R5 (R0,2)	2x Ø6xØ10 (2x Ø0.24xØ0.39)



\* R (CW): Clockwise  
 L (CCW): Anti-clockwise  
 M: Torque  
 Material

**Bracket**

WRD 22 / 23  
 Code: R2223

Example

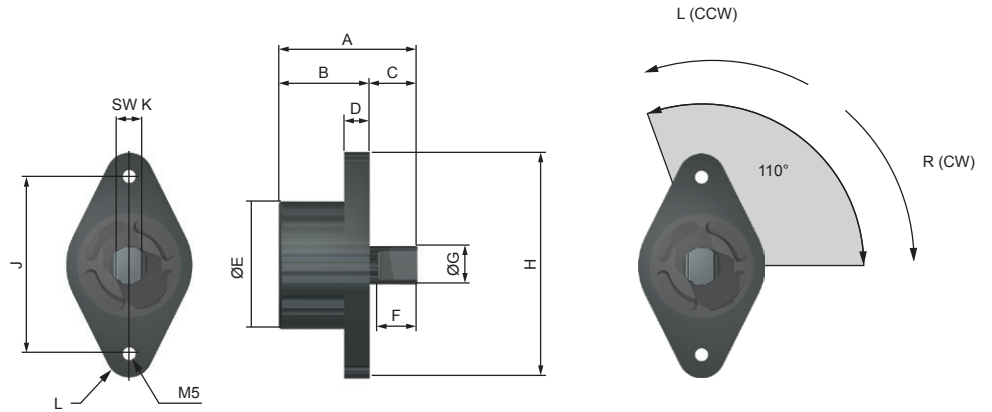


## WRD 40



R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 40 - R50	WRD 40 - L50	4,90 (43.37)	Alu die cast
WRD 40 - R70	WRD 40 - L70	6,86 (60.72)	
WRD 40 - R90	WRD 40 - L90	8,83 (78.15)	

A	B	C	D	E	F	G	H	J	K	L
43,5 (1.71)	28,5 (1.12)	15 (0.59)	8 (0.31)	40 (1.57)	12,5 (0.49)	12 (0.47)	71 (2.8)	56 (2.2)	8 (0.31)	7,5 (0.3)

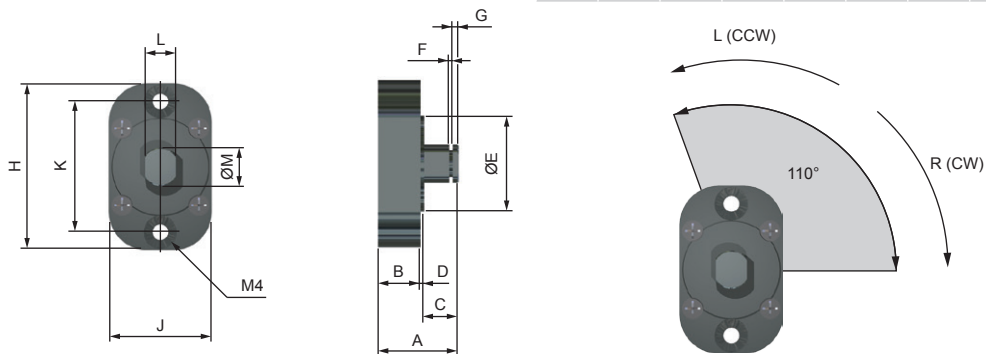


## WRD 60



R (CW)*	L (CCW)*	M* (Nm)	Material*
WRD 60 - R10	WRD 60 - L10	0,98	Alu die cast
WRD 60 - R15	WRD 60 - L15	1,47	
WRD 60 - R20	WRD 60 - L20	1,96	

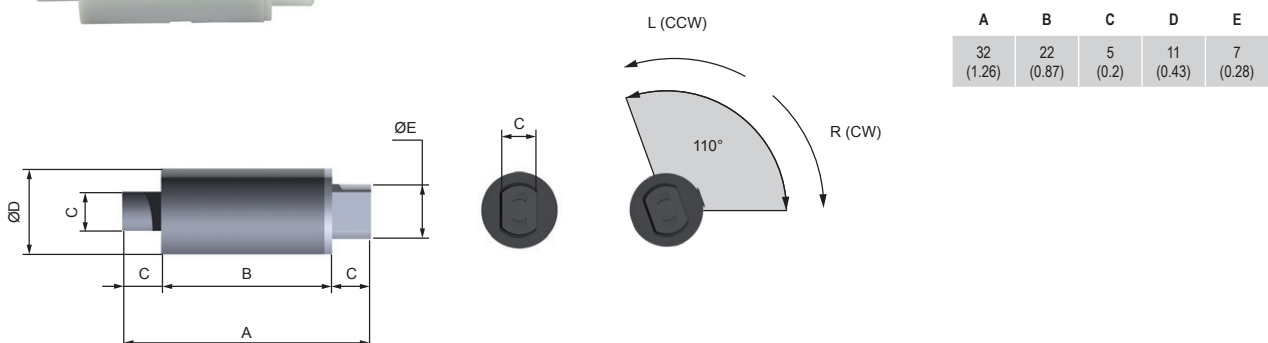
A	B	C	D	E	F	G	H	J	K	L	M
20,8 (0.82)	10,9 (0.43)	8,9 (0.35)	1 (0.04)	25 (0.98)	0,9 (0.04)	1,5 (0.06)	43,4 (1.71)	26,8 (1.06)	34 (1.34)	8 (0.31)	10 (0.39)



## WRD 73



R (CW)*	L (CCW)*	M* (Nm)	Material*
WRD 73 - R10	WRD 73 - L10	0,10	Plastic
WRD 73 - R20	WRD 73 - L20	0,20	
WRD 73 - R30	WRD 73 - L30	0,29	

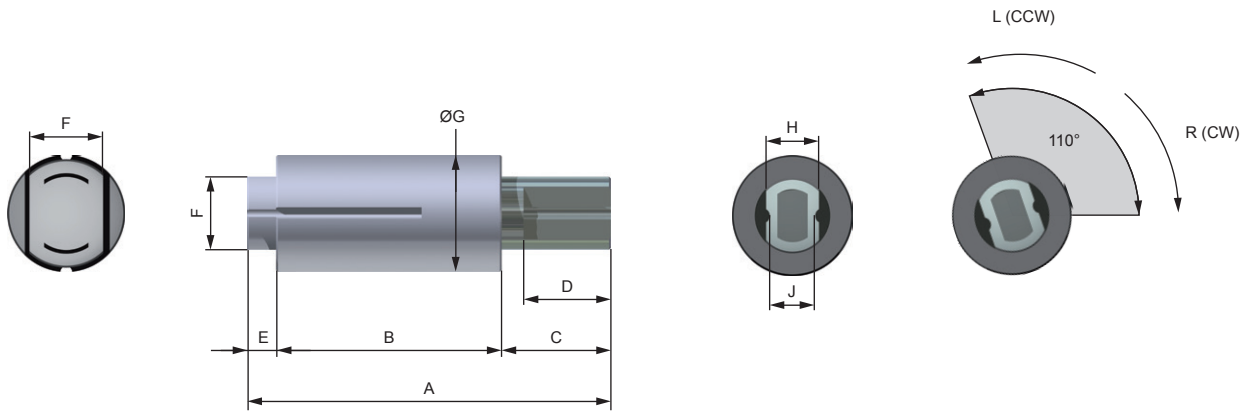


# WRD 100



R (CW)*	L (CCW)*	M* (Nm)	Material*
WRD 100 - R15	WRD 100 - L15	1,5	Plastic / Alu die cast
WRD 100 - R20	WRD 100 - L20	2,0	
WRD 100 - R25	WRD 100 - L25	2,5	
WRD 100 - R30	WRD 100 - L30	3,0	

A	B	C	D	E	F	G	H	J
50 (1.97)	31 (1.22)	15 (0.59)	12 (0.47)	4 (0.16)	10 (0.39)	16 (0.63)	7 (0.28)	6 (0.24)

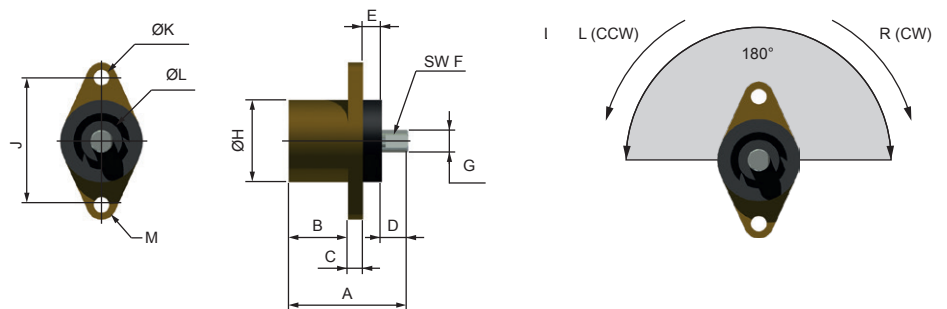


# WRD 34



R (CW)*	L (CCW)*	M* (Nm / in lbs)	Material*
WRD 34 - R15	WRD 34 - L15	0,15 (1.33)	Plastic / Alu die cast
WRD 34 - R30	WRD 34 - L30	0,29 (2.57)	
WRD 34 - R60	WRD 34 - L60	0,59 (5.22)	

A	B	C	D	E	F	G	H	J	K	L	M
32 (1.26)	16 (0.63)	4 (0.16)	7 (0.28)	5 (0.2)	5 (0.2)	6 <sup>+0.1</sup> <sub>-0.004</sub> (0.24)	22 (0.87)	34 (1.34)	4.2 (0.17)	11 (0.43)	R4 (R0.16)



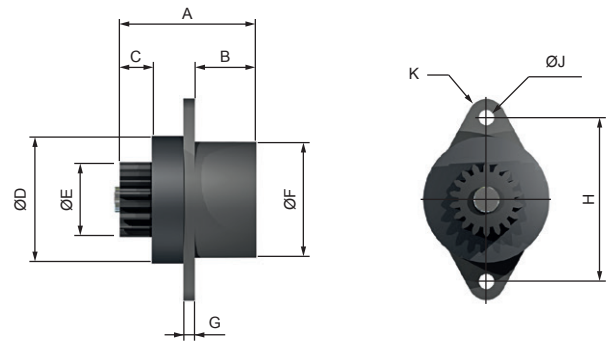
# WRD 58



R (CW)*	L (CCW)*	M* (Nm)	Material
WRD 58 - R30	WRD 58 - L30	0,30	Plastic / Alu die cast
WRD 58 - R50	WRD 58 - L50	0,50	
WRD 58 - R80	WRD 58 - L80	0,80	

A	B	C	D	E	F	G	H	J	K
38 (1.5)	16,5 (0.65)	10 (0.39)	34 (1.34)	20 (0.79)	31 (1.22)	3 (0.12)	44 (1.73)	4,2 (0.17)	R5 (R0.2)

Standard spur gear	
Modul	1
Number of gear teeth	18
Deceleration characteristics:	continuously



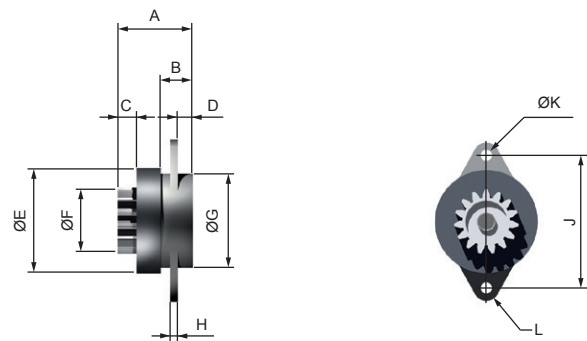
# WRD 62



R (CW)*	L (CCW)*	M* (Nm)	Material
WRD 62 - R3	WRD 62 - L3	0,03	Plastic / Alu die cast
WRD 62 - R6	WRD 62 - L6	0,06	
WRD 62 - R9	WRD 62 - L9	0,09	
WRD 62 - R15	WRD 62 - L15	0,15	
WRD 62 - R20	WRD 62 - L20	0,20	
WRD 62 - R25	WRD 62 - L25	0,25	

A	B	C	D	E	F	G	H	J	K	L
20 (0.79)	8,5 (0.33)	5 (0.2)	4 (0.16)	28 (1.1)	17,6 (0.69)	25 (0.98)	2 (0.08)	36 (1.42)	3,1 (0.12)	R3,5 (R0.14)

Standard spur gear	
Modul	1
Number of gear teeth	15
Deceleration characteristics:	continuously



\* R (CW): Clockwise  
 L (CCW): Counter-clockwise  
 M: Torque

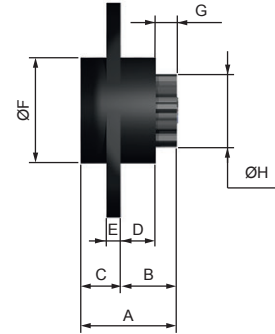
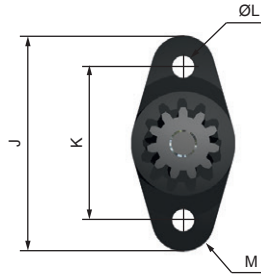
# WRD 88



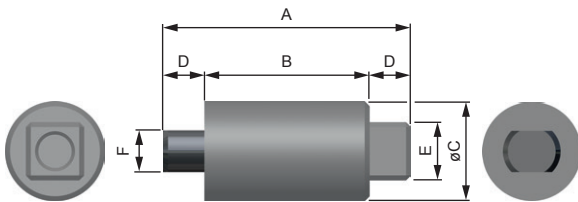
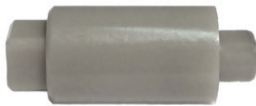
R (CW)*	L (CCW)*	M* (Nm)	Material*
WRD 88 - R40	WRD 88 - L40	0,04	Plastic / Alu die cast

A	B	C	D	E	F	G	H	J	K	L	M
21 (0.83)	12,5 (0.49)	8,5 (0.33)	7,5 (0.3)	3 (0.12)	15 (0.59)	4,5 (0.18)	10,4 (0.41)	30 (1.18)	22 (0.87)	3,2 (0.13)	R4,5 (R0.18)

Standard spur gear	
Modul	0,8
Number of gear teeth	11
Deceleration characteristics:	continuously



# WRD 101



C*	M* (Nm)	Material*	Deceleration characteristics
WRD 101 - C25	0,0025	Plastic	continuously
WRD 101 - C40	0,004		

A	B	C	D	E	F	G
15 (0.59)	10 (0.39)	6 (0.24)	2,5 (0.1)	3,5 (0.14)	2,5 (0.1)	3,5 (0.14)

\* R (CW): Clockwise  
 L (CCW): Counter-clockwise  
 C: Clockwise and counter-clockwise  
 M: Torque



## WRD 470-L/R

Damping: Clockwise or counter-clockwise



Rotational speed max. **50 U/min (rpm)**

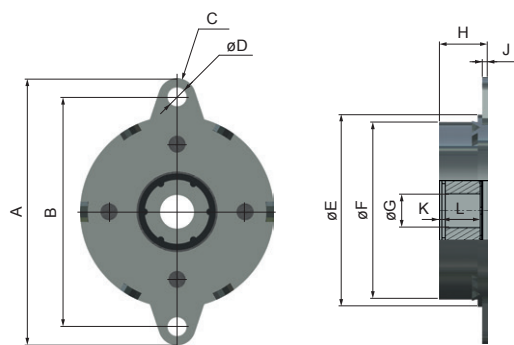
Cycle rate (1 cycle: 360° left + 360° right) **12 / min**

Do not use the rotary dampers as supports - an external guidance is required

R (CW)*	L (CCW)*	M* (Nm)	Material
WRD 470-R1	WRD 470-L1	1,0 ±0,3	Steel zinc plated / Plastic
WRD 470-R2	WRD 470-L2	2,0 ±0,3	

\*R (CW): Clockwise / L (CCW): Counter-clockwise / M: Torque

A	B	C	D	E	F	G	H	J	K	L
65 (2.56)	56 (2.2)	R4,5 (R0,18)	4,5 (0.18)	47 (1.85)	42,8 (1.69)	6 (0.24)	10,3 (0.41)	1,6 (0.06)	1 (0.04)	9 (0.35)



## WRD 470-C

Damping: Both directions



Rotational speed max. **50 U/min (rpm)**

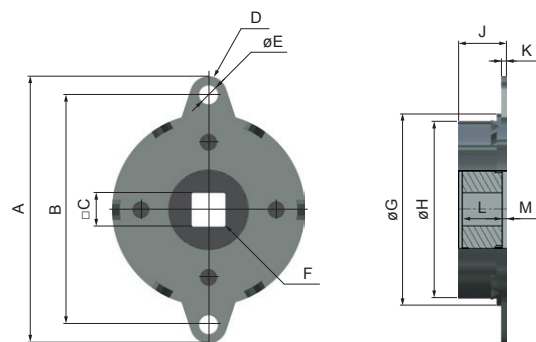
Cycle rate (1 cycle: 360° left + 360° right) **12 / min**

Do not use the rotary dampers as supports - an external guidance is required

C*	M* (Nm)	Material
WRD 470-C2	2,0 ±0,3	Steel zinc plated / Plastic
WRD 470-C3	3,0 ±0,3	
WRD 470-C4	4,0 ±0,3	

\* C: Both directions / M: Torque

A	B	C	D	E	F	G	H	J	K	L	M
65 (2.56)	56 (2.2)	8 (0.31)	R4,5 (R0,18)	4,5 (0.18)	R0,5 (R0,02)	47 (1.85)	42,8 (1.69)	10,3 (0.41)	1,6 (0.06)	8 (0.31)	1,5 (0.06)



## WRD 570-L/R

Damping: Clockwise or counter-clockwise

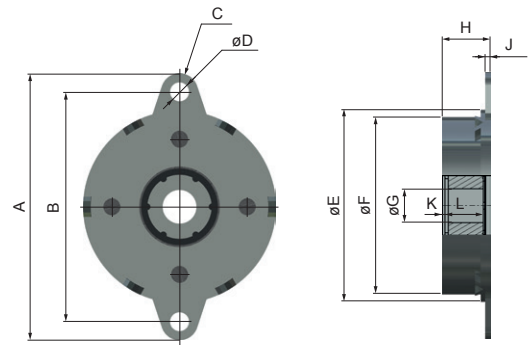


Rotational speed max. **50 U/min (rpm)**  
 Cycle rate (1 cycle: 360° left + 360° right) **12 / min**  
 Do not use the rotary dampers as supports -  
 an external guidance is required

R (CW)*	L (CCW)*	M* (Nm)	Material
WRD 570-R3	WRD 570-L3	3,0 ±0,3	Steel zinc plated / Plastic
WRD 570-R4	WRD 570-L4	4,0 ±0,5	
WRD 570-R5	WRD 570-L5	5,0 ±0,5	
WRD 570-R6	WRD 570-L6	6,0 ±0,5	
WRD 570-R7	WRD 570-L7	7,0 ±0,5	
WRD 570-R8	WRD 570-L8	8,0 ±0,5	

\* R (CW): Clockwise / L (CCW): Counter-clockwise / M: Torque

A	B	C	D	E	F	G	H	J	K	L
79 (3.11)	68 (2.68)	5,5 (0.22)	R5,5 (R0,22)	57 (2.24)	52,4 (2.06)	10 (0.39)	13,8 (0.54)	1,6 (0.06)	1 (0.04)	11 (0.43)



## WRD 570-C

Damping: Both directions

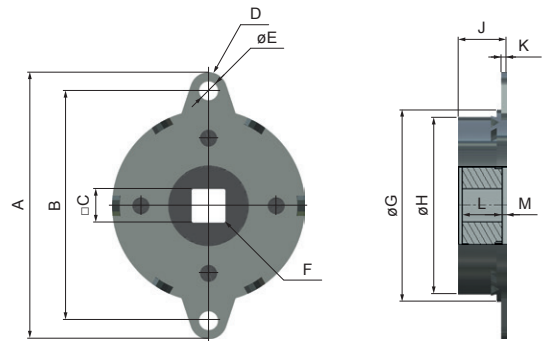


Rotational speed max. **50 U/min (rpm)**  
 Cycle rate (1 cycle: 360° left + 360° right) **12 / min**  
 Do not use the rotary dampers as supports -  
 an external guidance is required

C*	M* (Nm)	Material
WRD 570-C3	3,0 ±0,3	Steel zinc plated / Plastic
WRD 570-C4	4,0 ±0,5	
WRD 570-C5	5,0 ±0,5	
WRD 570-C6	6,0 ±0,5	
WRD 570-C7	7,0 ±0,5	
WRD 570-C8	8,0 ±0,5	

\* C: Both directions / M: Torque

A	B	C	D	E	F	G	H	J	K	L	M
79 (3.11)	68 (2.68)	10 (0.39)	R5,5 (R0,22)	5,5 (0.22)	R0,5 (R0,02)	57 (2.24)	52,4 (2.06)	11,2 (0.44)	1,6 (0.06)	9 (0.35)	1 (0.04)



## Rotary Dampers high-torque range (180°)

### WRD 0607 - 1207

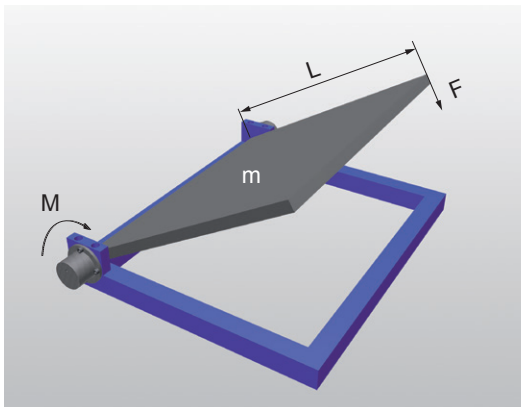


#### Controlled damping of rotary movements

**High torques** up to 700 Nm  
**Damping** Both sides, clockwise and counter-clockwise

Adjustable from WRD 2515  
 Fixed setting up to WRD 2010  
 Material Aluminium, steel  
 Temperature range -10°C - +60°C (14°F - +140°F)  
 RoHS compliant Directive 2002/95/EC  
**Applications** Damping of rotary movement in flaps, covers and lids

## CALCULATION



Example	Formula & Calculation	Selection
m = 50,0 kg L = 0,30 m	$M = g \times m \times L/2 = 73,58 \text{ Nm}$	<b>WRD-H 6030R</b>
F = 200,0 N L = 0,10 m	$M = F \times L = 20 \text{ Nm}$	<b>WRD-H 4025R</b>

#### LEGEND

m	(kg)	Mass	M	(Nm)	Torque
L	(m)	Lenght	g	(m/s <sup>2</sup> )	Accerelation due to gravity (9,81 m/s <sup>2</sup> )
F	(N)	Force			

Online calculation (imperial / metric) at [www.weforma.com](http://www.weforma.com)

## TORQUE

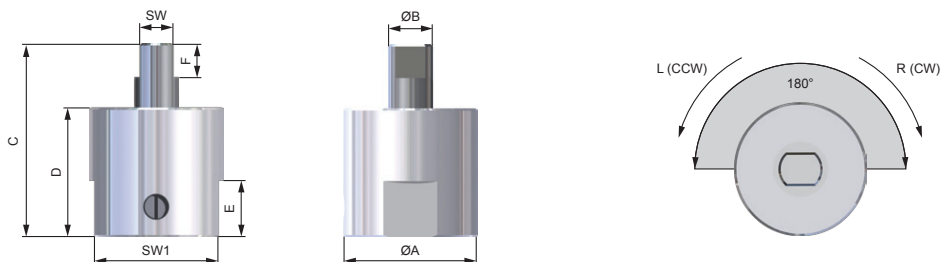
Clockwise	Anti-clockwise	Clockwise and anticlockwise	Torque Nm (in lbs)	Opening angle °	Weight g (oz)
WRD-H 0607-R	WRD-H 0607-L	WRD-H 0607-C	0,08 (0.71)	180	4 (0.14)
WRD-H 0805-R	WRD-H 0805-L	WRD-H 0805-C	0,2 (1.77)	180	5 (0.1)
WRD-H 1208-R	WRD-H 1208-L	WRD-H 1208-C	1,1 (9.74)	180	14 (0.49)
WRD-H 1610-R	WRD-H 1610-L	WRD-H 1610-C	2,6 (23.01)	180	24 (0.85)
WRD-H 2010-R	WRD-H 2010-L	WRD-H 2010-C	3,5 (30.98)	180	29 (1.02)
WRD-H 2515-R	WRD-H 2515-L	WRD-H 2515-C	10 (88.5)	180	81 (2.86)
WRD-H 3015-R	WRD-H 3015-L	WRD-H 3015-C	14 (123.9)	180	109 (3.84)
WRD-H 4025-R	WRD-H 4025-L	WRD-H 4025-C	40 (354.0)	180	354 (12.49)
WRD-H 6030-R	WRD-H 6030-L	WRD-H 6030-C	110 (973.6)	180	759 (26.78)
WRD-H 7550-R	WRD-H 7550-L	WRD-H 7550-C	250 (2213)	180	4665 (164.55)
WRD-H 9565-R	WRD-H 9565-L	WRD-H 9565-C	500 (4425)	180	10155 (358.21)
WRD-H 12070-R	WRD-H 12070-L	WRD-H 12070-C	700 (6196)	180	18560 (654.68)

Idle: At the beginning of the deceleration max. 5°

## WRD-H 0607 / 0805 / 1208 / 1610 / 2010



R (CW)*	L (CCW)*	C*	M* (Nm / in lbs)	Reverse running	Material
WRD-H 0607-R	WRD-H 0607-L	WRD-H 0607-C	0,08 (0.71)	0,03 (0.27)	Aluminum / Steel
WRD-H 0805-R	WRD-H 0805-L	WRD-H 0805-C	0,2 (1.77)	0,08 (0.71)	
WRD-H 1208-R	WRD-H 1208-L	WRD-H 1208-C	1,1 (9.74)	0,25 (2.21)	
WRD-H 1610-R	WRD-H 1610-L	WRD-H 1610-C	2,6 (23.01)	0,2 (1.77)	
WRD-H 2010-R	WRD-H 2010-L	WRD-H 2010-C	3,5 (30.98)	0,5 (4.43)	

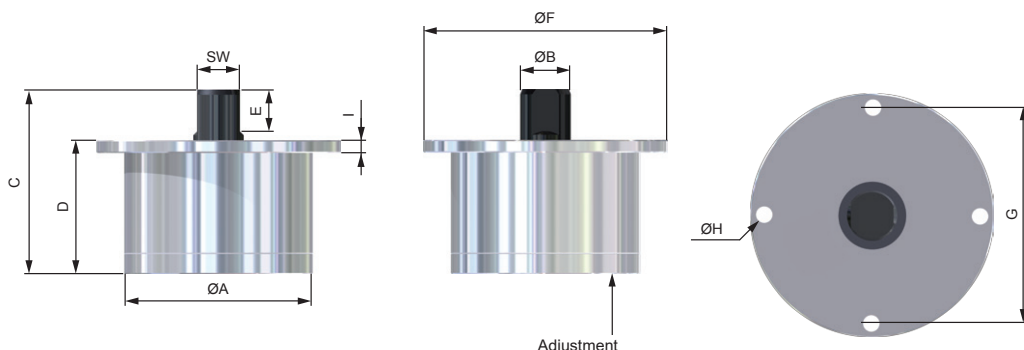


	ØA	ØB	C	D	E	F	SW	SW1
WRD-H 0607	9 (0.35)	3 f7 (0.12)	18,7 (0.74)	13,0 (0.51)	4 (0.16)	2 (0.08)	2,6 (0.10)	8 (0.31)
WRD-H 0805	12 (0.47)	4 f7 (0.16)	17,2 (0.68)	11,5 (0.45)	5 (0.2)	3 (0.12)	3 (0.12)	11 (0.43)
WRD-H 1208	18 (0.71)	5 f7 (0.2)	21 (0.83)	15,5 (0.61)	5 (0.2)	3 (0.12)	4 (0.16)	15 (0.59)
WRD-H 1610	21 (0.83)	6 f7 (0.24)	26 (1.02)	19 (0.75)	10 (0.39)	6 (0.24)	4 (0.16)	18 (0.71)
WRD-H 2010	24 (0.94)	6 f7 (0.24)	25 (0.98)	18 (0.71)	10 (0.39)	6 (0.24)	4 (0.16)	22 (0.87)

## WRD-H 2515 / 3015 / 4025 / 6030



R (CW)*	L (CCW)*	C*	M* max (Nm / in lbs)	M* min (Nm / in lbs)	Reverse running	Material
WRD-H 2515-R	WRD-H 2515-L	WRD-H 2515-C	10 (88.5)	1,5 (13.28)	0,8 (7.08)	Aluminum / Steel
WRD-H 3015-R	WRD-H 3015-L	WRD-H 3015-C	14 (123.9)	2 (17.7)	0,7 (6.2)	
WRD-H 4025-R	WRD-H 4025-L	WRD-H 4025-C	40 (354.0)	12,5 (110.63)	2,5 (22.13)	
WRD-H 6030-R	WRD-H 6030-L	WRD-H 6030-C	110 (973.6)	25 (221.27)	7,5 (66.38)	

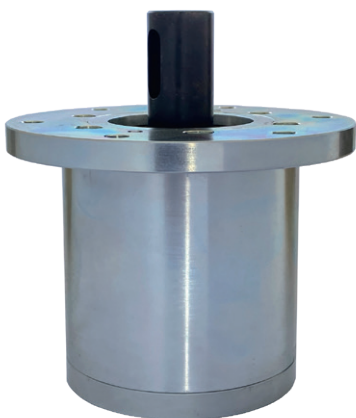


	ØA	ØB	C	D	E	ØF	G	ØH	SW	I
WRD-H 2515	32 (1.26)	7 f7 (0.28)	39,8 (1.57)	30 (1.18)	9 (0.35)	47 (1.85)	40 (1.57)	4,1 (0.16)	5 (0.2)	5 (0.2)
WRD-H 3015	38 (1.5)	8 f7 (0.31)	39 (1.54)	29 (1.14)	9 (0.35)	56 (2.2)	47,5 (1.87)	5,1 (0.2)	6 (0.24)	5 (0.2)
WRD-H 4025	55 (2.17)	10 f7 (0.39)	59 (2.32)	45 (1.77)	14 (0.55)	77 (3.03)	66 (2.6)	6,6 (0.26)	8 (0.31)	10 (0.39)
WRD-H 6030	75 (2.95)	20 f7 (0.79)	73 (2.87)	53 (2.09)	16,6 (0.65)	97 (3.82)	86 (3.39)	6,6 (0.26)	17 (0.67)	5 (0.2)

\* R (CW): Clockwise / L (CCW): Anti-clockwise / C: Clockwise and anti-clockwise / M: Torque

# WRD-H

## WRD-H 7550 / 9565 / 12070

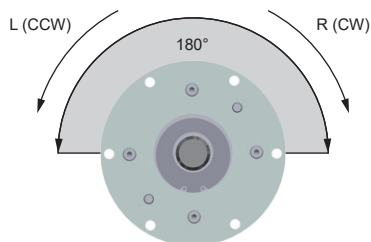
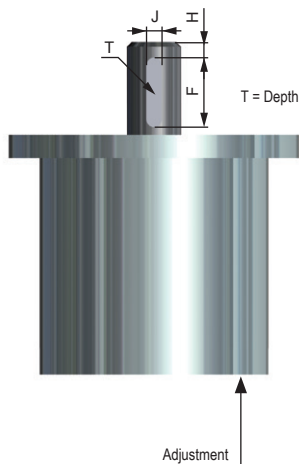
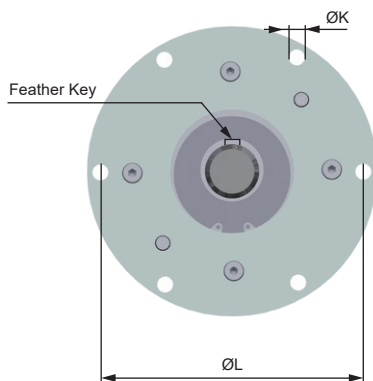
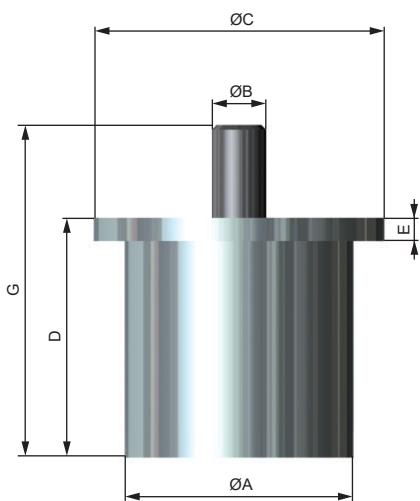


R (CW)*	L (CCW)*	C*	M* max (Nm / in lbs)	M* min (Nm / in lbs)	M* Reverse Running L/R (Nm / in lbs)	Material*
WRD-H 7550-R	WRD-H 7550-L	WRD-H 7550-C	250 (2213)	65 (575)	30 (266)	Steel
WRD-H 9565-R	WRD-H 9565-L	WRD-H 9565-C	500 (4425)	140 (1239)	110 (974)	
WRD-H 12070-R	WRD-H 12070-L	WRD-H 12070-C	700 (6196)	270 (2390)	250 (2213)	

	ØA	ØB	ØC	D	E	F	G	H	J	T	ØK	ØL
WRD-H 7550	90 (3.54)	25 f7 (0.98)	130 (5.12)	100 (3.94)	10 (0.39)	25 (0.98)	140 (5.51)	6,4 (0.25)	8 (0.31)	4 (0.16)	8,2 (0.32)	110 (4.33)
WRD-H 9565	120 (4.72)	30 f7 (1.18)	155 (6.1)	125 (4.92)	15 (0.59)	32 (1.26)	175 (6.89)	9 (0.35)	10 (0.39)	4 (0.16)	8,2 (0.32)	137,5 (5.41)
WRD-H 12070	148 (5.83)	35 f7 (1.38)	188 (7.4)	155 (6.1)	15 (0.59)	45 (1.77)	215 (8.46)	10 (0.39)	10 (0.39)	5 (0.2)	10,5 (0.41)	168 (6.61)

### FEATHER KEY\*

	M	N	P
WRD-H 7550	25 (0.98)	8 (0.31)	7 (0.28)
WRD-H 9565	32 (1.26)	10 (0.39)	8 (0.31)
WRD-H 12070	45 (1.77)	10 (0.39)	8 (0.31)



\* R (CW): Clockwise  
 L (CCW): Anti-clockwise  
 C: Clockwise and anti-clockwise  
 M: Torque  
 Material

# WRD-H-VA



**Material** Housing Stainless steel V2A /  
DIN 1.4305 / AISI 303

**Piston rod** DIN 1.4125 / AISI 440C

Corrosion resistance in wet environments  
Temperature -10°C - +60°C (14°F - +140°F)  
Special oils Food-grade according to USDA-H1

**Applications** Food industry, Outside machinery,  
Medical technology

Clockwise	Counter-clockwise	Clockwise and counter-clockwise	Torque Nm (in lbs)	Weight kg (lbs)
WRD-H 0607-R-VA	WRD-H 0607-L-VA	WRD-H 0607-C-VA	0,08 (0.71)	0,007 (0.015)
WRD-H 0805-R-VA	WRD-H 0805-L-VA	WRD-H 0805-C-VA	0,2 (1.77)	0,009 (0.02)
WRD-H 1208-R-VA	WRD-H 1208-L-VA	WRD-H 1208-C-VA	1,1 (9.74)	0,025 (0.055)
WRD-H 1610-R-VA	WRD-H 1610-L-VA	WRD-H 1610-C-VA	2,6 (23.01)	0,041 (0.09)
WRD-H 2010-R-VA	WRD-H 2010-L-VA	WRD-H 2010-C-VA	3,5 (30.98)	0,049 (0.108)
WRD-H 2515-R-VA	WRD-H 2515-L-VA	WRD-H 2515-C-VA	10 (88.5)	0,19 (0.419)
WRD-H 3015-R-VA	WRD-H 3015-L-VA	WRD-H 3015-C-VA	14 (123.9)	0,257 (0.57)
WRD-H 4025-R-VA	WRD-H 4025-L-VA	WRD-H 4025-C-VA	40 (354.0)	0,863 (1.9)
WRD-H 6030-R-VA	WRD-H 6030-L-VA	WRD-H 6030-C-VA	110 (973.6)	1,58 (3.48)
WRD-H 7550-R-VA	WRD-H 7550-L-VA	WRD-H 7550-C-VA	250 (2213)	4,67 (10.3)
WRD-H 9565-R-VA	WRD-H 9565-L-VA	WRD-H 9565-C-VA	500 (4425)	10,22 (22.54)
WRD-H 12070-R-VA	WRD-H 12070-L-VA	WRD-H 12070-C-VA	700 (6196)	18,61 (41.04)

Idle: At the beginning of the deceleration max. 5°

## Rotary Dampers high-torque range (360°)

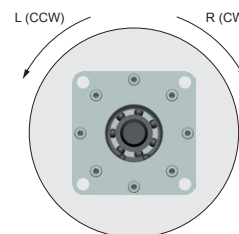
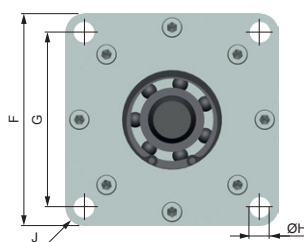
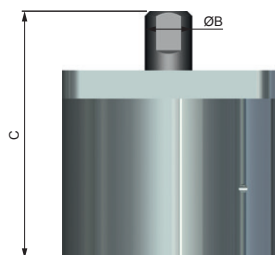
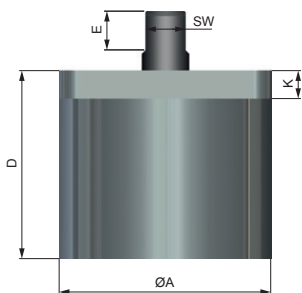
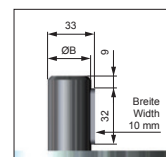
# WRD-HK 3515 / 5550 / 10060

**Controlled damping of continuous rotary movements**  
**High torques up to 110 Nm**  
**Damping clockwise or counter-clockwise, adjustable**

**Material:** Aluminium, Steel  
**Temperature:** -10°C - +60°C (14°F - +140°F)  
**RoHS compliant:** Directive 2002/95/EC



WRD-HK 10060



R (CW)*	L (CCW)*	M* max. (Nm)	M* min. (Nm)	M* Reverse Running L/R	Rotational speed	Material	Weight kg (lbs)
WRD-HK 3515-R	WRD-HK 3515-L	8 (71)	1 (9)	0,5 - 1,0 (4 - 9)	30 U/min (rpm) max.	Aluminum / Steel	0,27 (1)
WRD-HK 5550-R	WRD-HK 5550-L	40 (354)	5 (44)	1,0 - 3,0 (9 - 27)			1,95 (4)
WRD-HK 10060-R	WRD-HK 10060-L	110 (974)	10 (89)	5,0 - 7,0 (44 - 62)			7,4 (16)

	ØA	ØB	C	D	E	F	G	ØH	J	K	SW
	mm (inch)										
WRD-HK 3515	45 (1.77)	10 f7 (0.39)	60 (2.36)	45 (1.77)	10 (0.39)	47 (1.85)	38 (1.5)	5,5 (0.22)	2,5 (0.1)	10 (0.39)	8 (0.31)
WRD-HK 5550	90 (3.54)	20 f7 (0.79)	105 (4.13)	80 (3.15)	16,5 (0.65)	90 (3.54)	74 (2.91)	8,5 (0.33)	8 (0.31)	12 (0.47)	17 (0.67)
WRD-HK 10060	150 (5.91)	30 f7 (1.81)	160 (6.3)	110 (4.33)	-	150 (5.91)	126 (4.96)	13 (0.51)	10 (0.39)	20 (0.79)	-

\* R (CW): Clockwise  
 L (CCW): Counter-clockwise  
 M: Torque