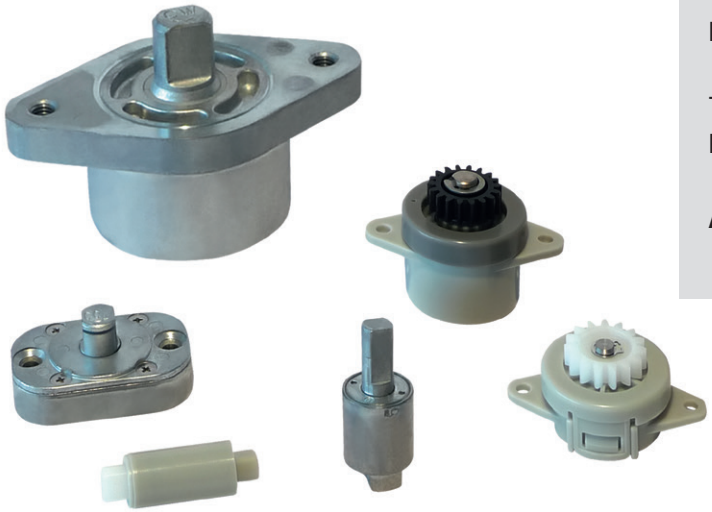
WRD



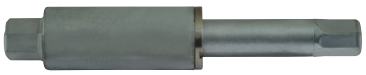
Material	**Plastic and aluminium di cast**
Torques	**up to 9 Nm**
Damping	right-turning and left-turning fixed setting (WRD 22 / 23 adjustable)
Temperature	-5°C - +50°C (23°C - +122°C)
RoHS compliant	Directive 2002/95/EC
Applications	Damping of rotational movements of flaps, hoods and lids

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)		
WRD 19 - R15	WRD 19 - L10	1,47 (13.01)	110	30 (1.06)
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)		
WRD 20 - R20	WRD 20 - L20	1,96 (17.35)	110	12 (0.42)
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)		
WRD 22 - R13	WRD 22 - L13	0,49 - 1,27 (4.34 - 11.24)	110	30 (1.06)
WRD 22 - R20	WRD 22 - L20	0,98 - 1,96 (8.67 - 17.35)		
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)		
WRD 40 - R50	WRD 40 - L50	4,9 (43.37)	110	200 (7.06)
WRD 40 - R70	WRD 40 - L70	6,86 (60.72)		
WRD 40 - R90	WRD 40 - L90	8,82 (78.15)		
WRD 60 - R10	WRD 60 - L10	0,98 (8.67)	110	60 (2.15)
WRD 60 - R15	WRD 60 - L15	1,47 (13.01)		
WRD 60 - R20	WRD 60 - L20	1,96 (17.35)		
WRD 73 - R10	WRD 73 - L10	0,10 (0.89)	110	2 (0.07)
WRD 73 - R20	WRD 73 - L20	0,20 (1.77)		
WRD 73 - R30	WRD 73 - L30	0,29 (2.57)		
WRD 100 - R15	WRD 100 - L15	1,5 (13.28)	110	22 (0.78)
WRD 100 - R20	WRD 100 - L20	2,0 (17.70)		
WRD 100 - R25	WRD 100 - L25	2,5 (22.13)		
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)		

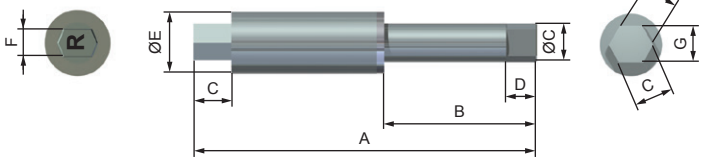
Clockwise	Counter-clockwise	Torque Nm (in lbs)	Opening angle °	Weight g (oz)
WRD 58 - R30	WRD 58 - L30	0,3 (2.66)	continously	40 (1.41)
WRD 58 - R50	WRD 58 - L50	0,5 (4.43)		
WRD 58 - R80	WRD 58 - L80	0,8 (7.08)		
WRD 62 - R3	WRD 62 - L3	0,03 (0.27)	continously	16 (0.56)
WRD 62 - R6	WRD 62 - L6	0,06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

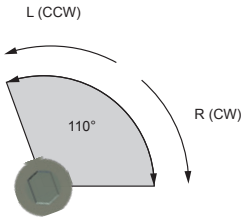
WRD 16



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)

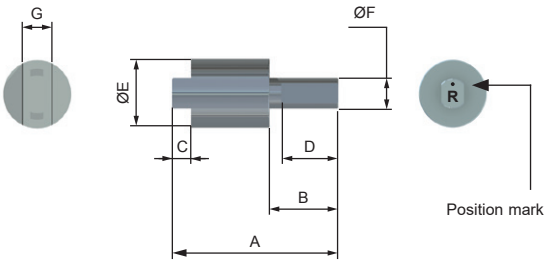


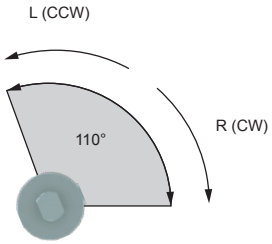


WRD 18 / 19

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)

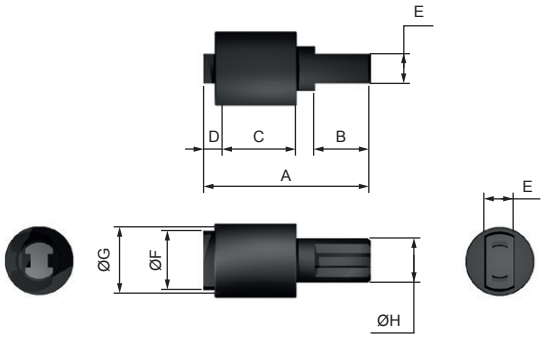


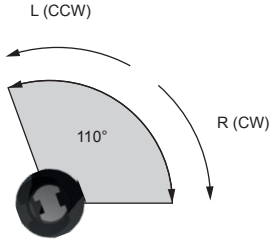


WRD 20

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)	$8_{-0.2}$ ($0.31_{0.01}$)	16 (0.63)	$20_{-0.2}$ ($0.79_{0.01}$)	$12_{-0.2}$ ($0.47_{0.01}$)

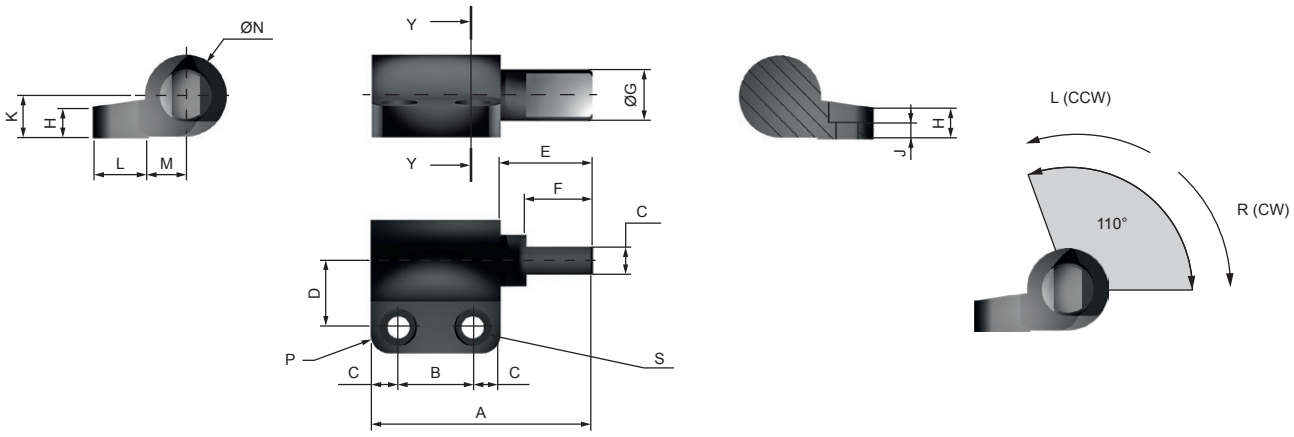




WRD 22

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)	

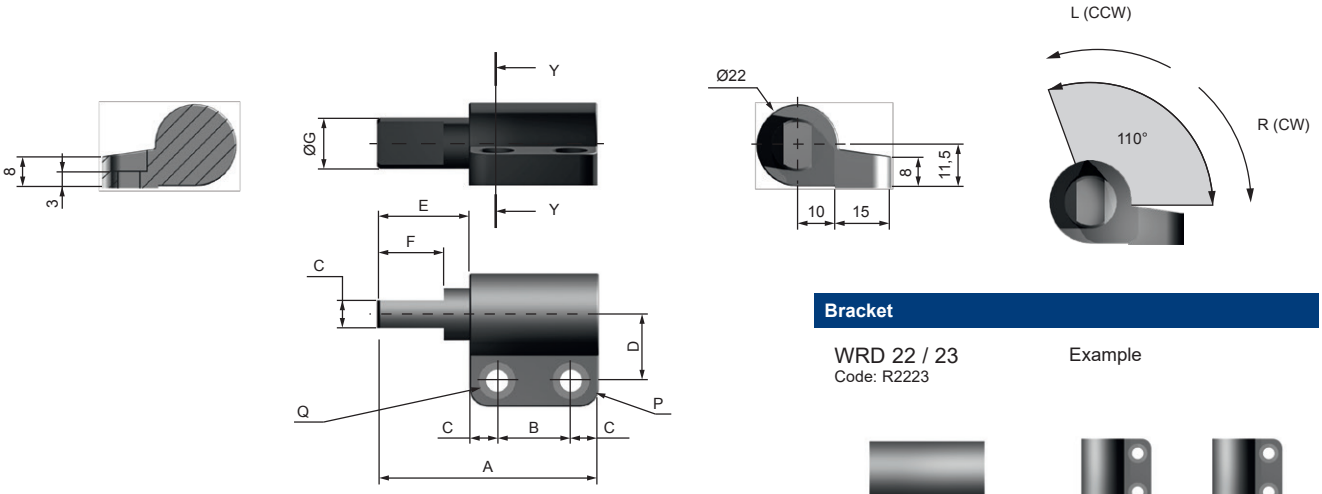
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
60 (2.36)	20 (0.79)	7,5 (0.3)	18 (0.71)	25 (0.98)	18 (0.71)	14 (0.55)	8 (0.31)	3 (0.12)	11,5 (0.45)	15 (0.59)	10 (0.39)	22 (0.87)	R5 (R0,2)	2x Ø6xØ10 (2x Ø0.24xØ0.39)



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)



Bracket

WRD 22 / 23
Code: R2223

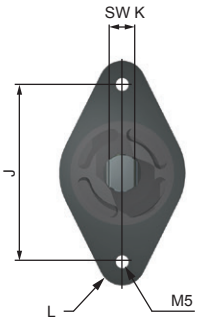
Example

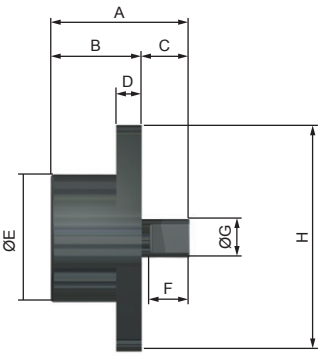
*** R (CW):** Clockwise
L (CCW): Anti-clockwise
M: Torque
Material

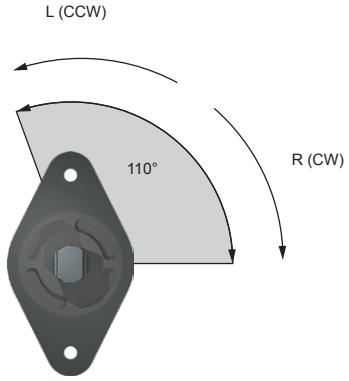
WRD 40

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)



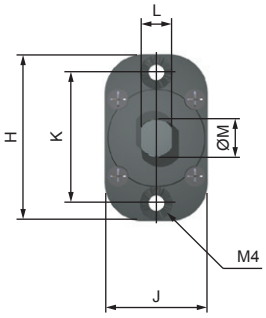


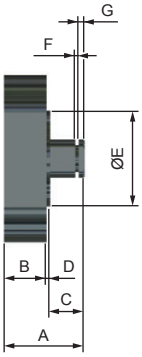


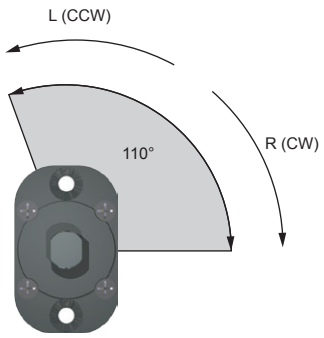
WRD 60

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)



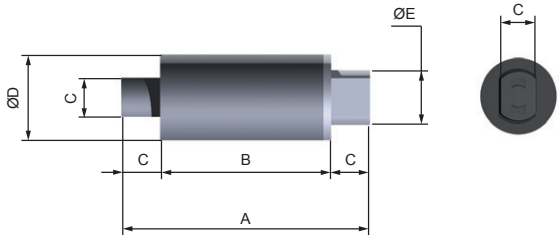


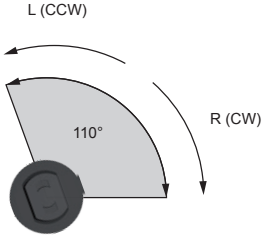


WRD 73

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	

A	B	C	D	E
32 (1.26)	22 (0.87)	5 (0.2)	11 (0.43)	7 (0.28)

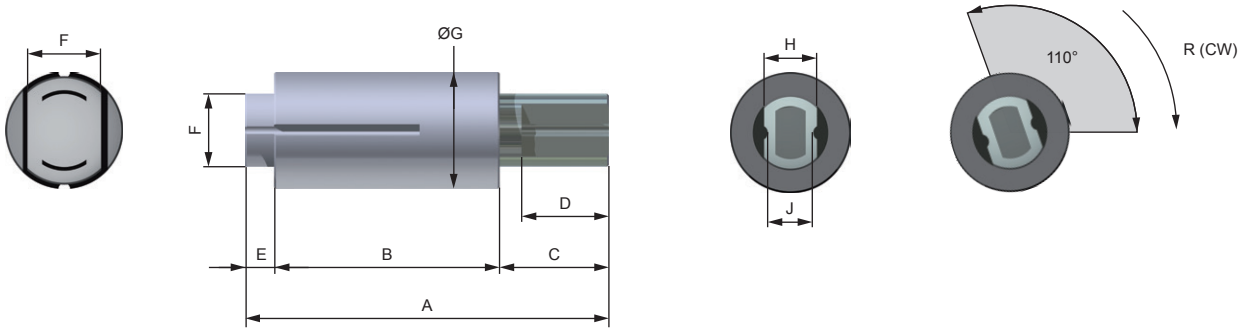




WRD 100

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	

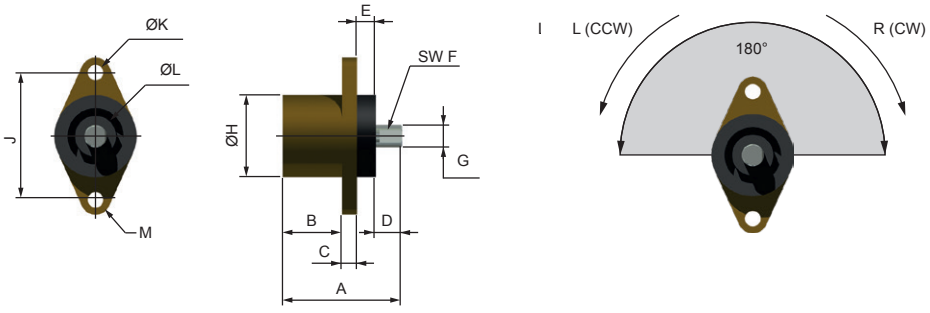
A	B	C	D	E	F	G	H	J
50 (1.97)	31 (1.22)	15 (0.59)	12 (0.47)	4 (0.16)	10 (0.39)	16 (0.63)	7 (0.28)	6 (0.24)



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)	$6_{-0,1}$ ($0.24_{-0.004}$)	22 (0.87)	34 (1.34)	4,2 (0.17)	11 (0.43)	R4 (R0,16)

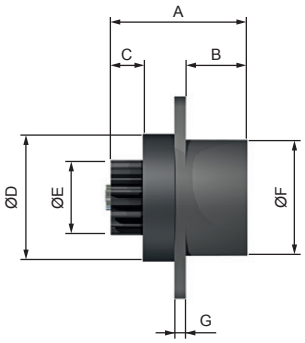


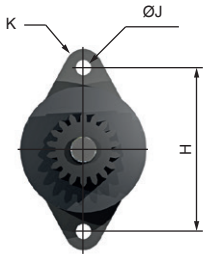
WRD 58

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:	continously



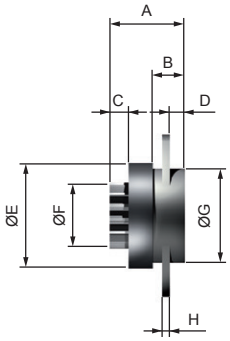


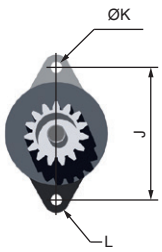
WRD 62

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:	continously



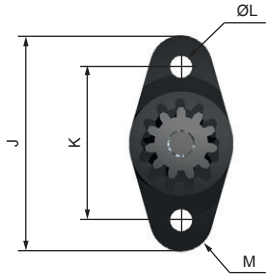


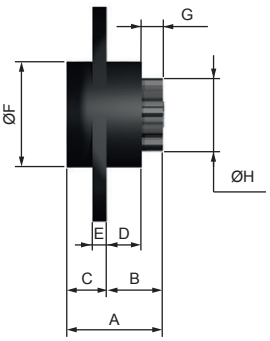
* **R (CW):** Clockwise
L (CCW): Counter-clockwise
M: Torque

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)



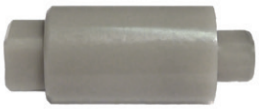


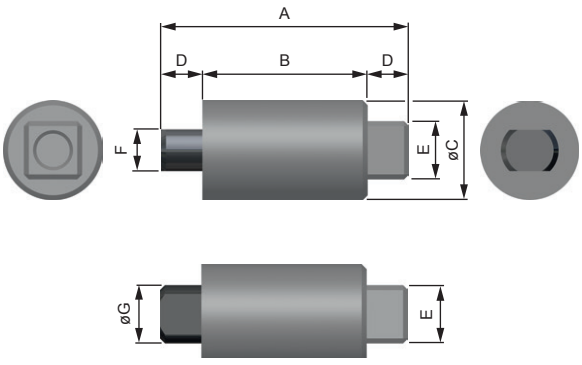
Standard spur gear	
Modul	**0,8**
Number of gear teeth	**11**
Deceleration characteristics:	continously

WRD 101

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

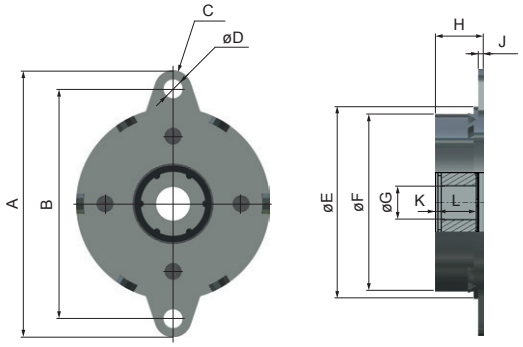
Damping: Clockwise or counter-clockwise

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)

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	



WRD 470-C

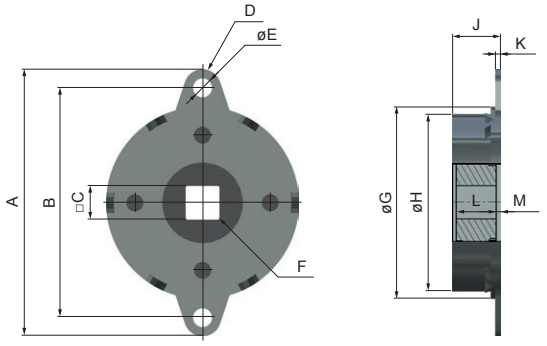
Damping: Both directions

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)

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	



WRD 570-L/R

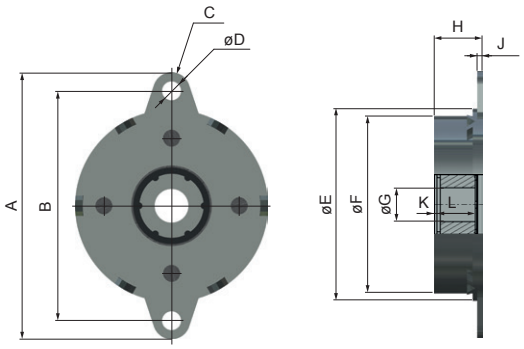
Damping: Clockwise or counter-clockwise

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)

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	



WRD 570-C

Damping: Both directions

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)

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