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Type	WDG 24C/30A	WDG 40A	WDG 40K	WDG 40S	WDG 50B
Flange	Synchro flange	Servo flange	Round flange	Screw flange	Clamping flange
Resolution	up to 1,024 PPR	up to 2,500 PPR			
Material housing	Aluminium	Aluminium, powder coated			
Dimensions housing	Ø 24 mm / Ø 30 mm, L 30 mm or 41 mm	Ø 40 mm, L 36 mm or 41.5 mm	Ø 40 mm, L 35 mm or 40.5 mm	Ø 40 mm, L 28 mm or 33.5 mm	Ø 50 mm, L 44 mm
Material shaft	Stainless steel				
Dimensions shaft	Ø 6 mm, L 12 mm	Ø 6 mm, L 11.5 mm	Ø 6 mm, L 12 mm	Ø 6 mm, L 13 mm	Ø 8 mm, L 15 mm
Operating speed	max. 12,000 min ⁻¹				
Permissible shaft load	max. 80 N radial, max. 50 N axial				max. 120 N radial, max. 70 N axial
Output circuit	TTL, RS422 compatible, HTL				
Output channels	AB, ABN and inverted signals				
Output frequency	max. 200 kHz				
Power supply	4.75 VDC to 5.5 VDC 5 VDC to 30 VDC				
Operating temperature	-40 °C to +80 °C	-20 °C to +80 °C (option: -40 °C to +80 °C)			
Protection class	IP65 outright (option: IP67 outright)	IP67, shaft sealed to IP65 (option: IP67 outright)			IP67, shaft sealed to IP65
wachendorff-automation.com	/wdg24c/wdg30a	/wdg40a	/wdg40k	/wdg40s	/wdg50b

















Incremental solid shaft encoders					
	 Stainless steel				
Type	WDG 53V	WDGI 58A	WDGI 58B	WDGI 58C	WDGI 58D
Flange	Screw flange	Synchro flange	Clamping flange	Synchro flange	Clamping flange
Resolution	up to 1,500 PPR	up to 25,000 PPR			
Material housing	Stainless steel, V4A	Die-cast aluminium, powder coated			
Dimensions housing	Ø 53 mm, L 35.5 mm	Ø 58 mm, L 42 mm			
Material shaft	Stainless steel, V4A	Stainless steel			
Dimensions shaft	Ø 6 mm, L 13 mm	Ø 6 mm, L 12 mm	Ø 10 mm, L 20 mm Ø 7, 8, 12 mm on request	Ø 10 mm, L 20 mm	Ø 12 mm, L 25 mm
Operating speed	max. 6,000 min ⁻¹	max. 10,000 min ⁻¹	max. 8,000 min ⁻¹		
Permissible shaft load	max. 20 N radial, max. 10 N axial	max. 125 N radial, max. 70 N axial	max. 220 N radial, max. 120 N axial	max. 200 N radial, max. 120 N axial	max. 500 N radial, max. 500 N axial
Output circuit	TTL, RS422 compatible, HTL	TTL, RS422 compatible, HTL, 1 Vpp sin/cos			
Output channels	AB, ABN and inverted signals				
Output frequency	max. 200 kHz	up to 2 MHz			
Power supply	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC 5 VDC to 30 VDC			
Operating temperature	-20 °C to +80 °C (option: -40 °C to +80 °C)	Connector outlet: -20 °C to +85 °C, Cable outlet: -20 °C to +80 °C, (option: -40 °C to +85 °C) 1 Vpp: -10 °C to +70 °C			
Protection class	IP68 outright	IP67, shaft sealed to IP65	IP67, shaft sealed to IP65 (option: IP67 outright)	IP67, shaft sealed to IP65	
wachendorff-automation.com	/wdg53v	/wdgi58a	/wdgi58b	/wdgi58c	/wdgi58d

Incremental solid shaft encoders					
			Available ex-stock 	High pressure/corrosion resistance 	Especially for the food and beverage industry 
Type	WDGI 58K	WDGI 58N	WDG 58T	WDG 58S	WDG 58V
Flange	Clamping flange				
Resolution	up to 25,000 PPR		360 PPR, 500 PPR, 1,024 PPR	up to 25,000 PPR	
Material housing	Die-cast aluminium, powder coated		Aluminium	Stainless steel, V4A	
Dimensions housing	Ø 58 mm, L 42 mm			Ø 58 mm, L 42 mm or 53 mm	
Material shaft	Stainless steel				
Dimensions shaft	Ø 12 mm, L 25 mm	Ø 6, L=10 mm Ø 8, 10 mm, L 20 mm Ø 3/8", L 22.3 mm	Ø 10 mm, L 20 mm	Ø 10 mm, L 18 mm	
Operating speed	max. 8,000 min ⁻¹			max. 3,600 min ⁻¹	
Permissible shaft load	max. 80 N radial, max. 50 N axial	max. 220 N radial, max. 120 N axial		max. 100 N radial, max. 100 N axial	
Output circuit	TTL, RS422 compatible, HTL, 1 Vpp sin/cos		HTL	TTL, RS422 compatible, HTL, 1 Vpp sin/cos	
Output channels	AB, ABN and inverted signals				
Output frequency	up to 2 MHz		max. 150 kHz	up to 2 MHz	
Power supply	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC 5 VDC to 30 VDC		5 VDC to 30 VDC	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC 5 VDC to 30 VDC	
Operating temperature	Connector outlet: -20 °C to +85 °C Cable outlet: -20 °C to +80 °C, (option: -40 °C to +85 °C), 1 Vpp: -10 °C to +70 °C		-10 °C to +70 °C	-20 °C to +80 °C (Opt.: -40 °C to +80 °C) 1 Vpp: -10 °C to +70 °C	-20 °C to +80 °C 1 Vpp: -10 °C to +70 °C
Protection class	IP67, shaft sealed to IP65 (option: IP67 outright)		IP50, shaft sealed to IP54	IP67 outright and IP69K, resistant to salt mist in accordance with DIN EN 60068-2-11	
wachendorff-automation.com	/wdgi58k	/wdgi58n	/wdg58t	/wdg58s	/wdg58v

Incremental solid shaft encoders					
					
Type	WDGI 63B	WDGI 63Q	WDGI 67Q	WDGI 70B	WDGI 115M/T
Flange	Clamping flange	Square flange		Clamping flange	Tacho flange
Resolution	up to 25,000 PPR				
Material housing	Die-cast aluminium, powder coated				
Dimensions housing	Ø 63.5 mm, 2.5", L 45 mm, 1.772"	□ 63.5 mm, 2.5", L 45 mm, 1.772"	□ 67.3 mm, 2.65", L 45 mm, 1.772"	Ø 70 mm, L 47 mm	Ø 115 mm, L 49 mm
Material shaft	Stainless steel				
Dimensions shaft	Ø 9.525 mm (3/8"), L 22.3 mm, (0.878"), Ø 10 mm, L 20 mm Ø 7 mm, 8 mm on request			Ø 12 mm, L 26 mm	M: Ø 11 mm, L 33 mm T: Ø 10 mm, L 25 mm T: Ø 7, 8, 12 mm on request
Operating speed	max. 8,000 min ⁻¹				
Permissible shaft load	max. 220 N radial, max. 120 N axial			max. 200 N radial, max. 150 N axial	max. 200 N radial, max. 120 N axial
Output circuit	TTL, RS422 compatible, HTL, 1 Vpp sin/cos				
Output channels	AB, ABN and inverted signals				
Output frequency	up to 2 MHz				
Power supply	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC 5 VDC to 30 VDC				
Operating temperature	Connector outlet: -20 °C to +85 °C, Cable outlet: -20 °C to +80 °C, (option: -40 °C to +85 °C), 1 Vpp: -10 °C to +70 °C				
Protection class	IP67, shaft sealed to IP65 (option: IP67 outright)				
wachendorff-automation.com	/wdgi63b	/wdgi63q	/wdgi67q	/wdgi70b	/wdgi115m/wdgi115t

Incremental hollow shaft encoders				
				
Type	WDG 40E	WDGI 58E	WDGI 58H	WDG 80H
Housing type	Hollow shaft		Hollow shaft	
Resolution	up to 2,500 PPR	up to 25,000 PPR		up to 3,840 PPR
Material housing	Aluminium, powder coated			
Dimensions housing	Ø 40 mm, L 32 mm or 37.5 mm	Ø 58 mm, L 38 mm or 40 mm	Ø 58 mm, L 38 mm	Ø 80 mm, L 40 mm
Material shaft	Stainless steel			
Dimensions shaft	Ø 6 mm	Ø 8, 10, 12, 15 mm	Ø 8, 10, 12, 14 mm	Ø 10, 12, 15, 18, 20, 25, 27 mm
Operating speed	max. 12,000 min ⁻¹	max. 6,000 min ⁻¹		max. 3,500 min ⁻¹
Permissible shaft load	max. 100 N radial, max. 50 N axial	max. 80 N radial, max. 60 N axial		max. 100 N radial, max. 100 N axial
Output circuit	TTL, RS422 compatible, HTL	TTL, RS422 compatible, HTL, 1 Vpp sin/cos		
Output channels	AB, ABN and inverted signals			
Output frequency	max. 200 kHz	up to 2 MHz		up to 200 kHz
Power supply	4.75 VDC to 5.5 VDC, 10 VDC to 30 VDC	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC 5 VDC to 30 VDC		
Operating temperature	-20 °C to +80 °C (Opt.: -40 °C to +80 °C)	Connector outlet: -20 °C to +85 °C Cable outlet: -20 °C to +80 °C, (option: -40 °C to +85 °C), 1 Vpp: -10 °C to +70 °C		-20 °C to +80 °C (option: -40 °C to +80 °C) 1 Vpp: -10 °C to +70 °C
Protection class	IP67, shaft sealed to IP65		IP65	
wachendorff-automation.com	/wdg40e	/wdgi58e	/wdgi58h	/wdg80h

Incremental hollow shaft encoders				
				
Type	WDG 100G	WDG 100H	WDG 100I	WDG 145H
Housing type	Hollow shaft			
Resolution	up to 20,480 PPR	up to 20,480 PPR	up to 20,480 PPR	up to 2,500 PPR
Material housing	Aluminium	Aluminium, powder coated		Aluminium
Dimensions housing	Ø 100 mm, L 37 mm	Ø 100 mm, L 37 mm	Ø 100 mm, L 37 mm	Ø 145 mm, L 50 mm
Material shaft	Stainless steel			
Dimensions shaft	Ø 25, 1 Z (=25.4), 28, 30, 32, 35, 36, 38, 40, 42, 45 mm		Ø 45 mm + insulating sleeve Ø 25, 30, 32, 38, 40, 42 mm	Ø 45, 48, 50, 55, 60, 65, 72 mm
Operating speed	max. 1,500 min ⁻¹	max. 3,500 min ⁻¹	max. 3,500 min ⁻¹	max. 1,600 min ⁻¹
Permissible shaft load	max. 200 N radial, max. 100 N axial			
Output circuit	TTL, RS422 compatible, HTL, 1 Vpp sin/cos			TTL, RS422 compatible, HTL
Output channels	AB, ABN and inverted signals			
Output frequency	up to 2 MHz			max. 200 kHz
Power supply	4.75 VDC to 5.5 VDC 10 VDC to 30 VDC 5 VDC to 30 VDC			4.75 VDC to 5.5 VDC 10 VDC to 30 VDC
Operating temperature	-20 °C to +80 °C (Opt.: -40 °C to +80 °C) 1 Vpp: -10 °C to +70 °C			-20 °C to +80 °C
Protection class	IP50	IP54 (option: IP55 outright)		IP54 (option: IP64 outright)
wachendorff-automation.com	/wdg100g	/wdg100h	/wdg100i	/wdg145h

Absolute solid shaft encoders					
   					
Type	WDGA 36A	WDGA 58A	WDGA 58B	WDGA 58S	WDGA 58V
Interfaces	CANopen, CAN SAE J1939, SSI, RS485		CANopen, CANopen Lift, CAN SAE J1939, SSI, RS485	CANopen, CAN SAE J1939, SSI, RS485	
Single-turn Resolution (steps/revolution) Accuracy Repeat accuracy	up to 16 bit < ± 0.35° < ± 0.20°				
Multi-turn number of revolutions	up to 43 bit				
Code	Binary or Gray				
Flange	Synchro flange		Clamping flange		
Material housing	Steel case chrome-plated, magnetic shielding				Stainless steel, V4A
Dimensions housing	Ø 36 mm, L 36 mm or 44 mm	Ø 58 mm, L 54 mm or 60.5 mm	Ø 58 mm, L 48 mm or 54.5 mm	Ø 58 mm, L 48 mm	Ø 58 mm, L 53 mm
Material shaft	Stainless steel				Stainless steel, V4A
Dimensions shaft	Ø 6 mm, 6.3 mm, 1/4" L 11.5 mm	Ø 6 mm, L 12 mm or Ø 10 mm, L 20 mm		Ø 10 mm, L 20 mm	Ø 10 mm, L 18 mm
Permissible shaft load max.	80 N radial, 50 N axial	125 N radial (Ø 6 mm), 120 N axial 220 N radial (Ø 10 mm), 120 N axial		100 N radial, 100 N axial	
Operating speed	max. 12,000 min ⁻¹	max. 8,000 min ⁻¹		max. 3,600 min ⁻¹	
Power supply	4.75 VDC to 5.5 VDC, 10 VDC to 32 VDC				
Protection class	IP67, shaft sealed to IP65, cable outlet: K1: IP40, K6: IP20	IP67, shaft sealed to IP65, cable outlet: K1: IP40		IP67 outright and IP69K, resistant to salt mist in accordance with DIN EN 60068-2-11	
Operating temperature	-40 °C to +85 °C				-20 °C to +80 °C
wachendorff-automation.com	/wdga				
Absolute hollow shaft encoders					
   					
Type	WDGA 36E			WDGA 58E	
Interfaces	CANopen, CAN SAE J1939, SSI, RS485			CANopen, CANopen Lift, CAN SAE J1939, SSI, RS485	
Single-turn Resolution (steps/revolution) Accuracy Repeat accuracy	up to 16 bit < ± 0.35° < ± 0.20°				
Multi-turn number of revolutions	up to 43 bit				
Code	Binary or Gray				
Flange	Hollow shaft				
Material housing	Steel case chrome-plated, magnetic shielding				
Dimensions housing	Ø 36 mm, L 29 mm or 43 mm	Ø 36 mm, L 31 mm or 45 mm	Ø 58 mm, L 38 mm		
Material shaft	Stainless steel				
Dimensions shaft	Ø 6 mm, 6.35 mm (1/4")	Ø 8, 10, 12, 14, 15 mm,		Ø 12 or 14 mm; Ø 6, 6.35 (1/4"), 7, 8, 9.525 (3/8"), 10 mm with adapter sleeve	
Permissible shaft load max.	80 N radial, 50 N axial				
Operating speed	max. 12,000 min ⁻¹	max. 6,000 min ⁻¹			
Power supply	4.75 VDC to 5.5 VDC, 10 VDC to 32 VDC				
Protection class	IP67, shaft sealed to IP65, cable outlet: K1: IP40, K6: IP20			IP67, shaft sealed to IP65, cable outlet: K1: IP40	
Operating temperature	-40 °C to +85 °C				
wachendorff-automation.com	/wdga				