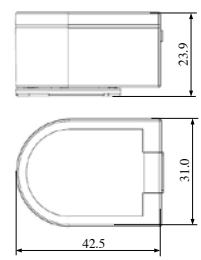
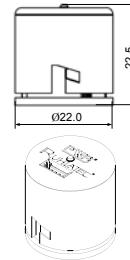
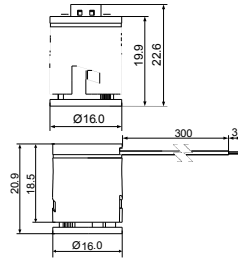
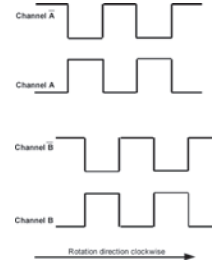
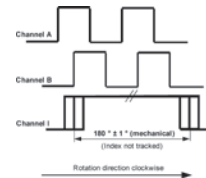
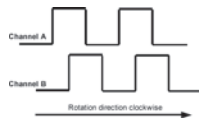


Optical encoder		ME16	ME22	AE30
Diameter x Length	dmr x l / mm	16 x 22.6	22 x 22.5	
Diameter x Length radial cable	dmr x l / mm	16 x 20.9		
Width x Length x Height	b x l x h / mm			31.0 x 42.5 x 23.9



Electrical connection		Molex connector Contact 4x 50079-800 Housing 1x 51021-0400 or radial cable output	Molex connector Contact 5x 50079-800 Housing 1x 51021-0500	Wennmacher connector Contact 8x CX-T125F Housing 1x CX-H-125-B
No. of counts per rotation	Z / cpr	75 up to 200	1 up to 300	100 up to 1024
Output signal		A- / B- Channel 2 square outputs 90° phase shifted TTL compatible quadrature possible	A- / B- / Index- Channel 3 square outputs 90° phase shifted TTL compatible quadrature possible	A(+/-) / B(+/-) / Index(+/-) Channel 3 square outputs 90° phase shifted TTL compatible quadrature possible



Output option	V_{cc} / V		Pull-up / Push-pull / driver	Line driver
Operating temperature max.		-20 up to 85°C	-20 up to 85°C	-40 up to 100°C
Supply voltage	V_{cc} / V	typ. 5 / -0.5 up to 7	typ. 5 / -0.5 up to 7	typ. 5 / -0.5 up to 7
Supply current	I_{cc} / mA	typ. 15 / max. 18	typ. 15 / max. 38	typ. 17 / max. 85
Supply current / push-pull	I_{cc} / mA		max. 100	max. 150
Supply current / line driver	I_{cc} / mA		max. 65	max. 88
Output voltage	V_o / V	-0.5 up to V_{cc}	-0.5 up to V_{cc}	-0.5 up to V_{cc}
Load capacitance (2.7 kΩ)	C_L / pF	100	100	
Load capacitance (3.3 kΩ)	C_L / pF			100
Channel A and B				
High level output voltage	V_{OH} / V	min. 2.4	min. 2.4	min. 2.4
Low level output voltage	V_{OL} / V	max. 0.4	max. 0.4	max. 0.4
Rise time	$T_r / \mu s$	typ. 500	typ. 500	typ. 200
Fall time	$T_f / \mu s$	typ. 100	typ. 100	typ. 50
Output current per channel	I_{out} / mA	max. 8	max. 8	max. 8
Index Channel				
High level output voltage	V_{OH} / V		min. 2.4	min. 2.4
Level output voltage	V_{OL} / V		max. 0.4	max. 0.4
Rise time	$T_r / \mu s$		typ. 7	typ. 200
Fall time	$T_f / \mu s$		typ. 1.3	typ. 50
Output current	I_{cc} / mA		max. 8	max. 8
Push-pull option				
High level output voltage	V_{OH} / V		min. 3.8	min. 3.8
Low level output voltage	V_{OL} / V		max. 0.55	max. 0.55
Rise time	$T_r / \mu s$		typ. 5	typ. 5
Fall time	$T_f / \mu s$		typ. 5	typ. 5
Output current per channel	I_{out} / mA		max. 32	max. 32
Line driver option				
High level output voltage	V_{OH} / V		min. 2.5	min. 2.4
Low level output voltage	V_{OL} / V		max. 0.5	max. 0.4
Rise time	$T_r / \mu s$		typ. 20	typ. 12
Fall time	$T_f / \mu s$		typ. 20	typ. 12
Output current per channel	I_{out} / mA		max. 50	max. 20
Count frequency	kHz	typ. 30 / max. 60	typ. 30 / max. 60	max. 100
Pulse width error	$\Delta P / \text{°e}$	typ. 15 / max. 75	typ. 15 / max. 75	typ. 7 / max. 30
Phase error	$\Delta \phi / \text{°e}$	typ. 8 / max. 60	typ. 8 / max. 60	typ. 2 / max. 15
Position error	$\Delta \theta / \text{°m}$	typ. 0.4 / 0 up to 1.3	typ. 0.4 / 0 up to 1.3	