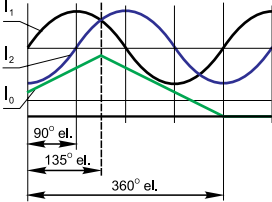
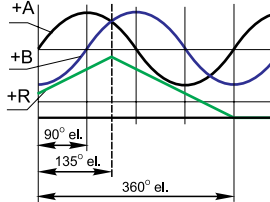
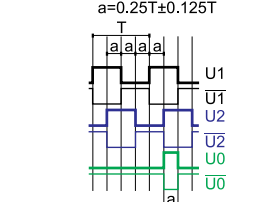


ELECTRICAL DATA

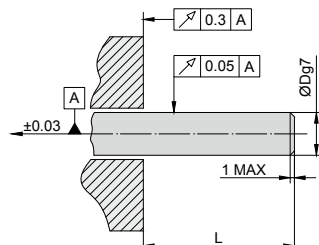
VERSION	A58H-A $\sim 11 \mu\text{App}$	A58H-AV $\sim 1 \text{Vpp}$	A58H-F \square TTL; \square HTL
Supply voltage (U_p)	+5 V \pm 5%	+5 V \pm 5%	+5 V \pm 5%; +(10 to 30) V
Max. supply current (without load)	80 mA	120 mA	120 mA
Light source	LED	LED	LED
Incremental signals	Two sinusoidal I_1 and I_2 Amplitude at 1 k Ω load: - $I_1 = 7\text{-}16 \mu\text{A}$ - $I_2 = 7\text{-}16 \mu\text{A}$	Differential sine +A/-A and +B/-B Amplitude at 120 Ω load: - A = 0.6-1.2 V - B = 0.6-1.2 V	Differential square-wave $U1/\overline{U1}$ and $U2/\overline{U2}$. Signal levels at 20 mA load current: - low (logic "0") ≤ 0.5 V at $U_p=+5$ V - low (logic "0") ≤ 1.5 V at $U_p=10$ to 30 V - high (logic "1") ≥ 2.4 V at $U_p=+5$ V - high (logic "1") $\geq (U_p-2)$ V at $U_p=10$ to 30 V
Reference signal	One quasi-triangular I_0 peak per revolution. Signal magnitude at 1 k Ω load: - $I_0 = 2\text{-}8 \mu\text{A}$ (usable component)	One quasi-triangular +R and its complementary -R per revolution. Signals magnitude at 120 Ω load - R = 0.2-0.8 V (usable component)	One differential square-wave $U0/\overline{U0}$ per revolution. Signal levels at 20 mA load current: - low (logic "0") < 0.5 V at $U_p=+5$ V - low (logic "0") < 1.5 V at $U_p=10$ to 30 V - high (logic "1") > 2.4 V at $U_p=+5$ V - high (logic "1") $> (U_p-2)$ V at $U_p=10$ to 30 V
Maximum operating frequency	(-3 dB) ≥ 160 kHz	(-3 dB) ≥ 180 kHz	(160 x k) kHz, k-interpolation factor
Direction of signals	I_1 lags I_2 for clockwise rotation (viewed from shaft side)	+B lags +A for clockwise rotation (viewed from shaft side)	$U2$ lags $U1$ with clockwise rotation (viewed from shaft side)
Maximum rise and fall time	-	-	$< 0.5 \mu\text{s}$
Standard cable length	1 m, without connector	1 m, without connector	1 m, without connector
Maximum cable length	5 m	25 m	25 m
Output signals			

Note:

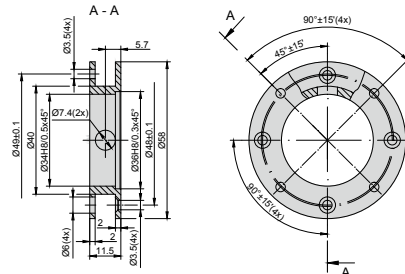
- Maximum working rotation speed (with proper encoder counting) is limited by maximum operating frequency and maximum mechanical rotation speed.
- If cable extension is used, power supply conductor cross-section should not be smaller than 0.5 mm².

MOUNTING REQUIREMENTS

L, mm	11 min for one side fixation
	56 min for both side fixation
	56 max for version with protective cover
	11 min for version without protective cover



ADAPTER



ACCESSORIES

CONNECTORS FOR CABLE	B12 12-pin round connector	C9 9-pin round connector	C12 12-pin round connector	D9 9-pin flat connector	D15 15-pin flat connector	RS10 10-pin round connector	ONC 10-pin round connector
DIGITAL READOUT DEVICES	CS3000			CS5000			
EXTERNAL INTERPOLATOR	NK						

ORDER FORM

OUTPUT SIGNAL VERSION:	PULSE NUMBER PER REVOLUTION:	OPTIONAL LINE NUMBER ON DISC (Z):	SHAFT HOLE DIAMETER:	SUPPLY VOLTAGE:	CABLE LENGTH:	CONNECTOR TYPE:	ADAPTER:
A AV F	1...100 ... 1...108000	100 ... 10800 *only for A58H-F	6, 8, 10, 12, 14* mm *with additional hub for shaft mounting, for one side fixation from flange side	05V - +5V 30V - +(10 to 30)V* *only for A58H-F with HTL output	AR01 - 1m AR02 - 2m AR03 - 3m ...	W - without connector B12 - round, 12 pins C9 - round, 9 pins C12 - round, 12 pins D9 - flat, 9 pins D15 - flat, 15 pins RS10 - round, 10 pins ONC - round, 10 pins	W - without adapter S - with adapter
ORDER EXAMPLES:		1) A58H-AV-1024-6-05V-AR01/W-W 2) A58H-F-4000-8-30V-AR06/C12-S 3) A58H-F-4000/500-8-30V-AR06/C12-S					