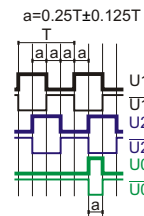
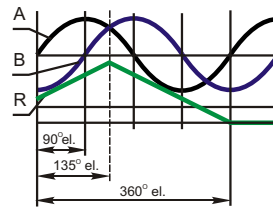
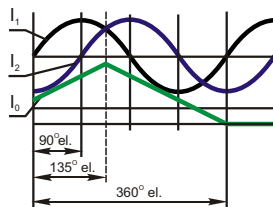




## Electrical Data

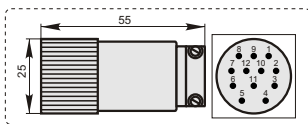
Version	A58-A $\sim 11 \mu\text{A}_{pp}$	A58-AV $\sim 1 \text{V}_{pp}$	A58-F $\square$ TTL; $\square$ HTL
Power supply ( $U_p$ )	+5 V $\pm 5\%$	+5 V $\pm 5\%$	+5 V $\pm 5\%$ ; +(10 to 30) V
Maximum consumed current (without load)	80 mA	120 mA	120 mA
Light source	LED	LED	LED
Incremental signals	Two sinusoidal $I_1$ and $I_2$ . Amplitude at 1 k load: - $I_1 = 7-16 \mu\text{A}$ - $I_2 = 7-16 \mu\text{A}$	Two sinusoidal A and B. Amplitude at 120 load: - A = 0.6-1.2 V - B = 0.6-1.2 V	Square-wave $U1$ , $U2$ and their inverted $\overline{U1}$ , $\overline{U2}$ . Signal levels at 20 mA load current: - low ("0" logic) $\leq 0.5 \text{ V}$ at $U_p=+5 \text{ V}$ - low ("0" logic) $\leq 1.5 \text{ V}$ at $U_p=10 \text{ to } 30 \text{ V}$ - high ("1" logic) $\geq 2.4 \text{ V}$ at $U_p=+5 \text{ V}$ - high ("1" logic) $\geq (U_p-2) \text{ V}$ at $U_p=10 \text{ to } 30 \text{ V}$
Reference signal	One quasi-triangle $I_0$ peak per revolution. Signal magnitude at 1 k load: - $I_0 = 2-8 \mu\text{A}$ (usable component)	One quasi-triangle R per revolution. Signal magnitude at 120 load: - R = 0.2-0.8 V (usable component)	One square-wave $U0$ and its inverted $\overline{U0}$ per revolution. Signal levels at 20 mA load current: - low ("0" logic) $\leq 0.5 \text{ V}$ at $U_p=+5 \text{ V}$ - low ("0" logic) $\leq 1.5 \text{ V}$ at $U_p=10 \text{ to } 30 \text{ V}$ - high ("1" logic) $\geq 2.4 \text{ V}$ at $U_p=+5 \text{ V}$ - high ("1" logic) $\geq (U_p-2) \text{ V}$ at $U_p=10 \text{ to } 30 \text{ V}$
Maximum operating frequency	(-3dB cutoff) $\geq 160 \text{ kHz}$	(-3dB cutoff) $\geq 160 \text{ kHz}$	160 kHz
Direction of signals	$I_2$ lags $I_1$ with clockwise rotation (viewed from shaft side)	B lags A with clockwise rotation (viewed from shaft side)	$U2$ lags $U1$ with clockwise rotation (viewed from shaft side)
Maximum rising and falling time			$< 0.5 \mu\text{s}$
Standard cable length	1 m, without connector	1 m, without connector	1 m, without connector
Cable diameter	6 mm	6 mm	6 mm
Maximum cable length	5 m	15 m	30 m for TTL, 100 m for HTL



## Accessories

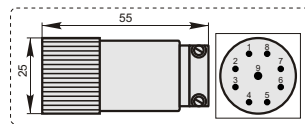
### C12

12-pin round connector for A58-AV and A58-F



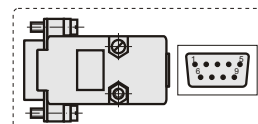
### C9

9-pin round connector for A58-A

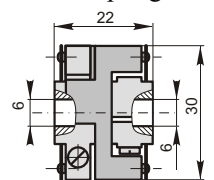


### D9

9-pin flat connector for all version of A58



### SC30 Coupling



Cable armour 6

## Order form

A58 - X - XXXXX - XXX - XXX / X - X

Version by output signals:  
A, AV or F

Pulse number per revolution:  
100...  
10800

Power supply:  
05V - +5V  
30V - +(10 to 30) V\*  
\*only for A58-F with HTL output signals

Cable length and outlet:  
A01 - 1m (A-axial outlet)  
A02 - 2m  
R03 - 3m (R-radial outlet)  
... - ...

Type of connector:  
W - without connector  
D9 - flat, 9 pins  
C9 - round, 9 pins  
C12 - round, 12 pins

Coupling:  
0 - without coupling  
1 - with coupling

or  
CA - connector on housing axial  
CR - connector on housing radial

