

# AVAGO Optical Encoders

## SINGLE TURN OPTICAL ABSOLUTE ENCODERS

MOUSER STOCK NO.	Avago Part No.	Fig.	Number of Channels	Resolution (CPR)	Signal Frequency	Supply Voltage	LED Current	Phase Error (typ)	Price Each				
									1	25	100	250	
630-AEAT-9000-1GSHO	AEAT-9000-1GSHO	A	2	2048	500 kHz	6 V	94 mA	5°e	65.00	63.00	60.00	59.00	
Codewheel													
630-HEDG-9000-H13	HEDG-9000-H13	B	For use with AEAT-9000 series encoders, made from glass, 17.5 mm optical radius							30.00	28.00	26.00	25.50

## REFLECTIVE OPTICAL ENCODERS - SURFACE MOUNT

MOUSER STOCK NO.	Avago Part No.	Fig.	Number of Channels	Resolution (LPI)	Pulse Width Error (Ch A, Ch B)(typ)	Phase Error (typ)	Max RPM	Count Frequency	Supply Voltage	LED Current	Price Each			
											1	25	100	250
630-AEDR-8000-1K2	AEDR-8000-1K2	C	2	75	15, 25 °e	12°e	9000	30 kHz typ	5.0 V	15 mA	13.50	10.50	9.90	9.30
630-AEDR-8300-1K2	AEDR-8300-1K2	D	2	75	15, 25 °e	12°e	9000	30 kHz typ	5.0 V	15 mA	6.54	5.05	4.78	4.49
630-AEDR-8300-1Q2	AEDR-8300-1Q2	D	2	180	16 °e	10°e	9000	30 kHz typ	5.0 V	15 mA	5.40	4.17	3.95	3.71
630-AEDR-8300-1W2	AEDR-8300-1W2	D	2	212	16 °e	10°e	9000	60 kHz max	3.3/5.0 V	15 mA	5.40	4.21	3.96	3.72

## REFLECTIVE INCREMENTAL ENCODERS - SURFACE MOUNT

MOUSER STOCK NO.	Avago Part No.	Fig.	Number of Channels	Resolution (LPI)	Pulse Width Error (Ch A, Ch B)(typ)	Phase Error (typ)	Max RPM	Count Frequency	Supply Voltage	LED Current	Price Each			
											1	25	100	250
630-AEDR-8500-102	AEDR-8500-102	E	3	304	15°e	9°e	---	56 kHz typ	7 V	15 mA	10.13	7.88	7.43	6.98

## REFLECTIVE OPTICAL ENCODERS - MINIATURE PANEL MOUNT

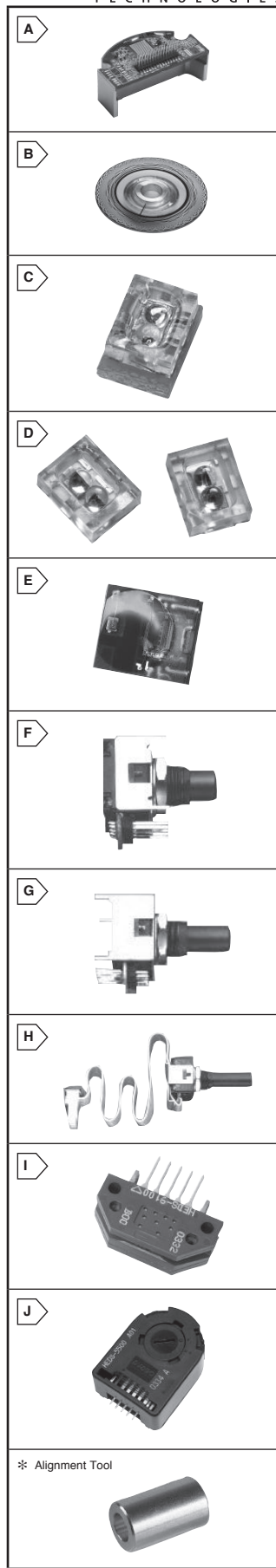
MOUSER STOCK NO.	Avago Part No.	Fig.	Shaft Diameter	Shaft Feel	Shaft Length	Resolution (CPR)	Price Each			
							1	25	100	250
<b>Pins Front with Bracket</b>										
630-HRPG-ASCA-54F	HRPG-ASCA#54F	F	6 mm	Smooth	12.7 mm	120	34.20	26.60	25.08	23.56
630-HRPG-AD16-56F	HRPG-AD16#56F	F	6 mm D-cut	Detented	12.7 mm	16	34.20	26.60	25.08	23.56
630-HRPG-ASCA-57F	HRPG-ASCA#57F	F	6 mm D-cut	Smooth	20.32 mm	120	34.20	26.60	25.08	23.56
630-HRPG-ASCA-17F	HRPG-ASCA#17F	F	0.25 in	Smooth	0.80 in	120	34.20	26.60	25.08	23.56
630-HRPG-AD32-19F	HRPG-AD32#19F	F	0.25 in D-cut	Detented	0.80 in	32	34.20	26.60	25.08	23.56
<b>Pins Rear with Bracket</b>										
630-HRPG-ASCA-54R	HRPG-ASCA#54R	G	6 mm	Smooth	12.7 mm	120	34.20	26.60	25.08	23.56
630-HRPG-ASCA-14R	HRPG-ASCA#14R	G	0.25 in	Smooth	0.50 in	120	34.20	26.60	25.08	23.56
630-HRPG-AD32-13R	HRPG-AD32#13R	G	0.25 in D-cut	Detented	0.30 in	32	34.20	26.60	25.08	23.56
<b>Cable Connector</b>										
630-HRPG-AD32-53C	HRPG-AD32#53C	H	6 mm D-cut	Detented	7.6 mm	32	34.20	26.60	25.08	23.56
630-HRPG-ASCA-14C	HRPG-ASCA#14C	H	0.25 in	Smooth	0.50 in	120	34.20	26.60	25.08	23.56
630-HRPG-AD32-17C	HRPG-AD32#17C	H	0.25 in	Detented	0.80 in	32	34.20	26.60	25.08	23.56
630-HRPG-AD16-16C	HRPG-AD16#16C	H	0.25 in D-cut	Detented	0.50 in	16	34.20	26.60	25.08	23.56
630-HRPG-AD32-16C	HRPG-AD32#16C	H	0.25 in D-cut	Detented	0.50 in	32	34.20	26.60	25.08	23.56

## TRANSMISSIVE OPTICAL ENCODERS - MODULE TYPE

MOUSER STOCK NO.	Avago Part No.	Fig.	Number of Channels	Resolution (CPR)	Count Frequency	Max RPM	Rise Time	Fall Time	Price Each			
									1	25	100	250
630-HEDS-9000-U00	HEDS-9000#U00	I	2	2048	100 kHz	> 12000	200	50	28.58	22.23	20.96	19.69
630-HEDS-9040-B00	HEDS-9040#B00	I	3	1000	100 kHz	> 12000	200	50	28.80	22.40	21.12	19.84
630-HEDS-9100-A00	HEDS-9100#A00	I	2	500	100 kHz	> 12000	200	50	28.58	22.23	20.96	19.69
630-HEDS-9100-B00	HEDS-9100#B00	I	2	1000	100 kHz	> 12000	200	50	28.58	22.23	20.96	19.69
630-HEDS-9100-E00	HEDS-9100#E00	I	2	200	100 kHz	> 12000	200	50	28.58	22.23	20.96	19.69
630-HEDS-9140-A00	HEDS-9140#A00	I	3	500	100 kHz	> 12000	200	50	32.18	25.03	23.60	22.17
630-HEDS-9140-I00	HEDS-9140#I00	I	3	512	100 kHz	> 12000	200	50	32.18	25.03	23.60	22.17

## TRANSMISSIVE OPTICAL ENCODERS - HOUSED TYPE

MOUSER STOCK NO.	Avago Part No.	Fig.	Number of Channels	Resolution (CPR)	Shaft Size	Max RPM	Codewheel Material	Alignment Tool * (sold separately)	Price Each			
									1	25	100	250
630-HEDL-5540-A06	HEDL-5540#A06	J	3	500	1/4 in	> 12000	Line Driver	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDL-5540-A11	HEDL-5540#A11	J	3	500	4 mm	> 12000	Line Driver	HEDS-8910#011	57.42	44.66	42.11	39.56
630-HEDL-5540-A12	HEDL-5540#A12	J	3	500	6 mm	> 12000	Line Driver	HEDS-8910#012	57.42	44.66	42.11	39.56
630-HEDM-5500-B06	HEDM-5500#B06	J	2	1000	1/4 in	> 12000	Film	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDM-5500-B11	HEDM-5500#B11	J	2	1000	4 mm	> 12000	Film	HEDS-8910#011	57.42	44.66	42.11	39.56
630-HEDM-5500-J14	HEDM-5500#J14	J	2	1024	5 mm	> 12000	Film	HEDS-8910#014	57.42	44.66	42.11	39.56
630-HEDM-5540-B02	HEDM-5540-B02	J	3	1000	3 mm	> 12000	Film	HEDS-8910#002	57.42	44.66	42.11	39.56
630-HEDM-5600-J06	HEDM-5600#J06	J	2	1024	1/4 in	> 12000	Film	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5500-A05	HEDS-5500#A05	J	2	500	3/16 in	> 12000	Metal	HEDS-8910#005	57.42	44.66	42.11	39.56
630-HEDS-5500-A06	HEDS-5500#A06	J	2	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5500-A11	HEDS-5500#A11	J	2	500	4 mm	> 12000	Metal	HEDS-8910#011	57.42	44.66	42.11	39.56
630-HEDS-5500-E06	HEDS-5500#E06	J	2	200	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5500-F11	HEDS-5500#F11	J	2	256	4 mm	> 12000	Metal	HEDS-8910#011	57.42	44.66	42.11	39.56
630-HEDS-5500-F12	HEDS-5500#F12	J	2	256	6 mm	> 12000	Metal	HEDS-8910#012	57.42	44.66	42.11	39.56
630-HEDS-5500-I02	HEDS-5500#I02	J	2	512	3 mm	> 12000	Metal	HEDS-8910#002	57.42	44.66	42.11	39.56
630-HEDS-5505-A04	HEDS-5505#A04	J	2	500	5/32 in	> 12000	Metal	HEDS-8910#004	57.42	44.66	42.11	39.56
630-HEDS-5505-A06	HEDS-5505#A06	J	2	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5505-G06	HEDS-5505#G06	J	2	360	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5540-A06	HEDS-5540#A06	J	3	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5540-A14	HEDS-5540#A14	J	3	500	5 mm	> 12000	Metal	HEDS-8910#014	57.42	44.66	42.11	39.56
630-HEDS-5540-I06	HEDS-5540#I06	J	3	512	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5600-A06	HEDS-5600#A06	J	2	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5600-C06	HEDS-5600#C06	J	2	100	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5605-A06	HEDS-5605#A06	J	2	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5605-F13	HEDS-5605#F13	J	2	256	8 mm	> 12000	Metal	HEDS-8910#013	57.42	44.66	42.11	39.56
630-HEDS-5640-A06	HEDS-5640#A06	J	3	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5645-A06	HEDS-5645#A06	J	3	500	1/4 in	> 12000	Metal	HEDS-8910#006	57.42	44.66	42.11	39.56
630-HEDS-5645-H14	HEDS-5645#H14	J	3	400	5 mm	> 12000	Metal	HEDS-8910#014	57.42	44.66	42.11	39.56
630-HEDS-5645-I13	HEDS-5645#I13	J	3	512	8 mm	> 12000	Metal	HEDS-8910#013	57.42	44.66	42.11	39.56



\* Alignment Tool