

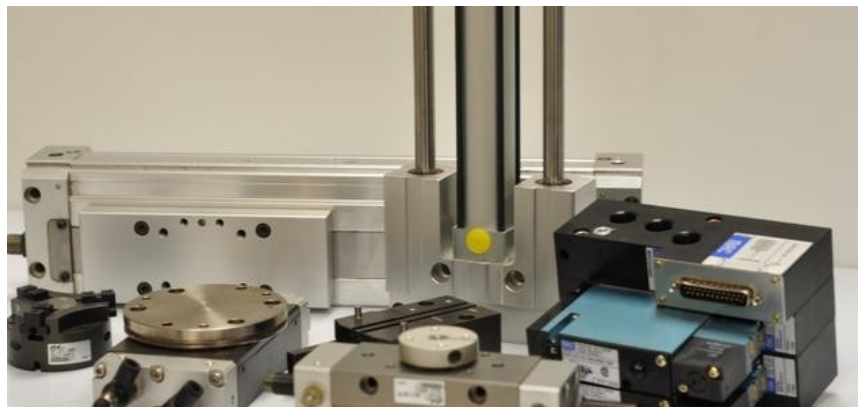


**PNEUMATIC AUTOMATION,
MOTION & ELECTRICAL
CONTROL PRODUCT
GUIDE**



2010

Version 3.0



Sensors

Inductive



Capacitive



Photo Electric



Laser



Pressure Transducers



Ultrasonic



Thermo Couple



Cables







Balluff

Features:
















- Metal Head
- Threaded Body
- 3 Wire
- DC Voltage

Use for DC Applications

Use for sensing metal

Appearance	Part Number	Diam. in MM	Output	Sensing Distance in MM	Length in MM	Switching function	Connect	Price
	BES M08EE-NSC20B-249G-003	8	NPN	2	40	NO	M8	\$64
	BES M08EE-PSC20B-S49G-003	8	PNP	2	40	NO	M8	\$64
	BES M08MG1-NSC60F-S49G	8	NPN	6	60	NO	M8	\$150
	BES M08MG1-PSC60F-S49G	8	PNP	6	60	NO	M8	\$150
	BES M12ME-NSC40B-S04G-003	12	NPN	4	50	NO	M12	\$63
	BES M12ME-PSC40B-S04G-003	12	PNP	4	50	NO	M12	\$63
	BES M12MC1-NSC10F-S04G	12	NPN	10	45	NO	M12	\$128
	BES M12MC1-PSC10F-S04G	12	PNP	10	45	NO	M12	\$128
	BES M18ME-NSC80B-S04G-003	18	NPN	8	44.5	NO	M12	\$63
	BES M18ME-PSC80B-S04G-003	18	PNP	8	44.5	NO	M12	\$63

Balluff: Short Body, 4 Wire, DC, Adjustable (potentiometer)

Appearance	Part Number	Diameter in MM	Output	Sensing Distance in MM	Connection	Body	Price
	 BCS M12T4D2-NSM40C-S04G	12	NPN	4	QD	METAL	\$179
	 BCS M12T4D2-PSM40C-S04G	12	PNP	4	QD	METAL	\$179
	 BCS M18B4G2-NSC80C-S04G	18	NPN	8	QD	METAL	\$169
	 BCS M18B4G2-PSC80C-S04G	18	PNP	8	QD	METAL	\$169
	 BCS M12VVG1-NSM40C-EP02	12	NPN	4	CABLE	PLASTIC	\$174
	 BCS M12VVG1-PSM40C-EP02	12	PNP	4	CABLE	PLASTIC	\$174
	 BCS M18VVM1-NS M80C-EV02	18	NPN	8	CABLE	PLASTIC	\$164
	 BCS M18VVM1-PS M80C-EV02	18	PNP	8	CABLE	PLASTIC	\$164
	 BCS M30KN2-NSC18G-AV02	30	NPN	15	CABLE	PLASTIC	\$153
	 BCS M30KN2-PSC18G-AV02	30	PNP	15	CABLE	PLASTIC	\$153

Balluff Intensity Difference—Diffuse, Self Contained, Quick Disconnect, Adjustable (Potentiometer), Dark-On

Appearance	Part Number	Type	Output	Sensing Distance in MM	Adjustable	Price
	BOS-5K-PS-RH12-S75	BACKGROUND SUPP	PNP	10-120	POT	\$99.00
	BOS-5K-NS-RH12-S75	BACKGROUND SUPP	NPN	10-120	POT	\$99.00
	BOS-5K-PS-ID10-S75	BACKGROUND SUPP	PNP	15-300	POT	\$66
	BOS-5K-NS-ID10-S75	BACKGROUND SUPP	NPN	15-300	POT	\$66

Balluff: Diffuse, Round Body, Self Contained, Quick Disconnect, Adjustable (Potentiometer) 18mm Diameter

Appearance	Part Number	Output	Sensing Distance in MM	Price
	BOS 18KF-NA-1PD-S4-C	NPN	400	\$66
	BOS 18KF-PA-1PD-S4-C	PNP	400	\$66

IDEC: Diffuse, Low Cost General Applications, 18mm Barrel, Self Contained

Appearance	Part Number	Output	Connector	Price
	S51-PA-5-C01-PK	PNP	M12	\$ 63.70
	S51-PA-5-C01-NK	NPN	M12	\$ 63.70

IDEC: Color Fiber-Optic Sensor







Features: True Color Sensor
24 VDC, Teachable

Appearance	Part Number	Type	Price
	SA1J-F1N1	NPN	\$709.43
	SA1J-F1P1	PNP	\$709.43

Autonics X Series









Appearance	Part Number	Description	Price
 	BF5R-D1-M	Autonics Fibre Optic amplifier	\$176.95

Balluff Fiber Optic Amplifiers

Appearance	Part Number	Description	Price
 	BOS 18KF-PA-1FR-S4-C	Fiber 10mm Threaded—PNP, M12 4 pin connector, accepts 2.2mm Fiber	\$91
 	BOS 18KF-NA-1FR-S4-C	Fiber Amplifier 10mm Threaded—NPN, M12 4 pin connector, accepts 2.2mm Fiber	\$91
 	BOS 16K-UU-1FR-0.2-S4	Minipro 18mm Block Style Fibre Optic amplifier, M12 4 pin connector, accepts 2.2mm Fiber	\$132

Sensors





C Frame Sensor

Appearance	Part Number	Description	Price
 	BGL-120A-003-S49	120 mm Frame, M8 3pin connector—PNP	\$291
 	BGL-120A-004-S49	120 mm Frame, M8 3pin connector—NPN	\$291
 	BGL-50A-003-S49	50 mm Frame, M8 3pin connector—PNP	\$255
 	BGL-50A-004-S49	50 mm Frame, M8 3pin connector—NPN	\$255






Analogue Laser measurement Sensor

Features:

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Appearance	Part Number	Description	Price
	 BOD 26K-LA01-S4-C	45-85 mm range, 0-10VDC output, M12 connector, triangulation type	\$1121
	 BOD 26K-LA07-S92-C	80-300 mm range, 4.20mA output, M12 connector, triangulation type	\$1250

Accessories

Appearance	Part Number	Description	Price
	 BOD 63M-LB04-S115	Laser time off flight sensors, 4-20 mA output, 6m range, M12 8 pin connector - PNP	\$1117
	 BOD 63M-LB05-S115	Laser time off flight sensors, 4-20 mA output, 6m range, M12 8 pin connector - NPN	\$1117
	 BCC M418-0000-1A-044-PX0825-020	2m Cable	\$34

Balluff










Appearance	Part Number	Type of Fiber Optic	Description	Price
	BOS 16K--UU-1FI-0.2-S4	Amplifier		\$132.00
	BOS 16K-AU-0FI-02	Amplifier	Rugged-Duty Solutions (glass fiber optic cables with 4.8 mm tips	\$147.00
	BFO 48G-DAN-SD-xx	Diffuse Cable		\$125.00
	BFO 48G-DT-SB-xx	Diffuse Cable		\$132.00
	BFO 48G-TAN-SD	Thru beam Cables		\$111.00
	BFO 48G-TT-SB-xx	Thru beam Cables		\$137.00
	BOS 18M-GU-1PF-S4-Y	Amplifier		\$561.00
	BOS 30M-PU-1PH-SA3-C	Amplifier	Tubular Amplifier Solutions (Glass Fiber Optic cables	\$643.00
	BFO 18A-XAA-MZG-30-xx	Diffuse Cable		\$348.00
	BFO 18V-XAD-SMG-30-xx	Diffuse Cable		\$308.00
	BFO 18A-LAA-MZG-20-xx	Thru beam Cables		\$566.00
	BFO 30S-LEE-SMG-20-xx	Thru beam Cables		\$589.00
	BMO A01-I-PU-C-02	Amplifier		\$203.00
	BMO A01-H-C1-C-02	Amplifier	Tubular Amplifier Solutions (Glass Fiber Optic cables	\$285.00
	BMOA 02SM-X12-1	Diffuse Sensing Heads		\$142.00
	BMOA 66RM-X63-R1	Diffuse Sensing Heads		\$193.00
	BMOA 02SM-B200-1	Thru beam Sensing Heads		\$142.00
	BMOA 06TM-B800-R1	Thru beam Sensing Heads		\$173.00
	BOS 18KF-PA-1FR-S4-C	Amplifier		\$91.00
	BFB 75K-003-N-02	Amplifier		\$387.00
	BFO D10-XA-GB-EAK-10-02	Diffuse Cable	Standard Solutions (Plastic fiber optic cables	\$90.00
	BFO D22-XB-UB-EAK-15-02	Diffuse Cable		\$77.00
	BFO D10-LA-CB-EAK-05-02	Thru beam Cables		\$401.00
	BFO N22-LA-FB-EAK-05-01	Thru beam Cables		\$95.00
	BOS 72K-Pu-RA10-S75	Amplifier		\$135.00
	BOS 72K-NU-RA20-02	Amplifier	Rugged-Duty Solutions (Glass fiber optic cables with 2.2mm tips	\$183.00
	BFO 22G-DAN-SD-xx	Diffuse Sensing Heads		\$125.00
	BFO 22G-DT-SD-xx	Diffuse Sensing Heads		\$321.00
	BFO 22G-TAN-SD-xx	Thru beam Sensing Heads		\$111.00
	BFO 22G-TT-SD-xx	Thru beam Sensing Heads		\$88.00



Pressure Transducers

Dwyer: 1/4" NPT, DIN Connector





Features: 0.25% Accuracy
 Use 0-10VDC output when less than 10 ft
 Use 4-20mA output on all other applications up to 100ft

Appearance	Part Number	Pressure Range-PSI	Output	Price
	 626-04-GH-P1-E4-S5	30VAC-60PSI	0-10 VDC	\$125.00
	 626-04-GH-P1-E4-S1	30VAC-60PSI	4-20mA	\$125.00
	 626-11-GH-P1-E4-S5	0-150	0-10 VDC	\$125.00
	 626-11-GH-P1-E4-S1	0-150	4-20mA	\$125.00
	 626-13-GH-P1-E4-S5	0-300	0-10 VDC	\$125.00
	 626-13-GH-P1-E4-S1	0-300	4-20mA	\$125.00
	 626-15-GH-P1-E4-S5	0-1000	0-10 VDC	\$125.00
	 626-15-GH-P1-E4-S1	0-1000	4-20mA	\$125.00





Sensors

Balluff Pressure Transducers

Standard Sensors

Appearance	Description	Price
	 2 Programmable switching outputs (NO or NC)	Starting at \$315.00
	 0...10V Dc, Analog output and 1 programmable switching output (NO or NC)	Starting at \$330.00
	 4...20mA, Analog output and 1 programmable switching output (NO or NC)	Starting at \$330.00

Stainless Steel Sensors

Appearance	Description	Price
	 2 Programmable switching outputs (NO or NC)	Starting at \$365.00
	 0...10V Dc, Analog output and 1 programmable switching output (NO or NC)	Starting at \$380.00
	 4...20mA, Analog output and 1 programmable switching output (NO or NC)	Starting at \$380.00

Balluff

-POT Adjustment

-Good to Detect Shiny Surfaces

-Quick Connector

-Liquids

Appearance	Part Number	Output	Range in MM	Diameter	Price
	BUS0007	PNP	200	10	\$368.00
	BUS0008	NPN	200	10	\$368.00
	BUS0005	PNP	200	12	\$449.00
	BUS0006	NPN	200	12	\$449.00
	BUS000P	PPN	1000	18	\$398.00
	BUS000U	NPN	1000	18	\$398.00

Balluff: Analog Output

-Good for Level, Position, Shiny Objects

Appearance	Part Number	Output	Range in MM	Price
	BUS R05K0-XACR-025-S75G	0-10 VDC	250	\$420.00
	BUS M18K0-XBER-040-S92K	4-20 mA	400	\$330.00

Dwyer

Features: 4-20 mA Signal, Two wire operation

Used to control speed on inverter drives based on temperature fan cooler application

Appearance	Part Number	Description	Type	Output	Price
	122095-84	3/16" Diameter, 4" Long w/Leads	"J" Type		\$16.60
	122095-24	Lug Mount	"J" Type		\$22.10
	650-3	Temp Transmitter, used with in- verter drives	0-100 C	4-20mA	\$275.00

Temperature Controls

Dwyer

Features:

- The units offer two separate outputs for dual loop control in direct or reverse acting. Select relay, voltage, or current output combined with a second relay output.
- Communicates with other external devices (PC's and PLC's) for data search and system integration using the built-in RS-485 interface, 247 communication addresses, transmission speeds of 2400 to 38,400 bps, universal input, selectable °F/°C, selectable resolution and security functions.
- Analog output temperature controls are good to be used on PID applications
- Relay outputs good for On/Off applications

Appearance	Part Number	Description	Output	Price
	32B-33	1/32 DIN, Dual Display	RELAY OUTPUT	\$89.00
	16B-33	1/16 DIN, Dual Display, Universal Input	RELAY OUTPUT	\$99.00
	16B-53	1/16 DIN	CURRENT OUTPUT AND RELAY OUTPUT	\$99.00
	16C-5	PID	CURRENT	\$80.00

Murr Round Plug Connectors 8mm Female

Features: 8mm
PVC Jacket
Gray Color

Appearance	Part Number	Poles	Type	Length	Price
	7000-08041-2100300	3	Straight	3M	\$8.65
	7000-08041-2100500	3	Straight	5M	\$10.20
	7000-08061-2110300	4	Straight	3M	\$10.90
	7000-08061-2110500	4	Straight	5M	\$12.65
	7000-08081-2100300	3	90°	3M	\$9.45
	7000-08081-2100500	3	90°	5M	\$10.90
	7000-08101-2110300	4	90°	3M	\$10.75
	7000-08101-2110500	4	90°	5M	\$12.45

Murr Round Plug Connectors 12mm Female

Features: 12mm
PVC Jacket
Gray Color

Appearance	Part Number	Poles	Type	Length	Price
	7000-12181-2130300	3	Straight	3M	\$11.20
	7000-12181-2130500	3	Straight	5M	\$12.70
	7000-12221-2140300	4	Straight	3M	\$11.65
	7000-12221-2140500	4	Straight	5M	\$13.40
	7000-12321-2130300	3	90°	3M	\$11.15
	7000-12321-2130500	3	90°	5M	\$14.40
	7000-12341-2140300	4	90°	3M	\$12.25
	7000-12341-2140500	4	90°	5M	\$13.80