



CONTREX, INC.
8900 Zachary Lane North
Maple Grove, MN 55369 USA
Tel: 763.424.7800 800.342.4411
Fax: 763.424.8734

EFFECTIVE August 1, 2005
FORM DS114X
PRICE SUBJECT TO CHANGE
WITHOUT NOTICE
PRICES ARE U.S. DOLLARS

PRICE LIST

PART NO.	DESCRIPTION	LIST PRICE
CX-1102		
3200-2040	<u>CX-1102</u> 2 AXIS CONTROL UNWIND/DANCER/WIND CONTROLLER	\$ 1,795
3200-2041	<u>CX-1102</u> 2 AXIS CONTROL WITH DEVICENET® BOARD INSTALLED	\$ 2,190
CX-1010		
3200-1944	<u>CX-1010</u> UNIVERSAL DIGITAL CONTROL FOR SPEED AND SPEED RATIO OPERATIONS	\$ 1,295
3200-1945	<u>CX-1010</u> WITH ANALOG BOARD INSTALLED	\$ 1,610
3200-1946	<u>CX-1010</u> WITH DEVICENET® BOARD INSTALLED	\$ 1,690
3200-1947	<u>CX-1010</u> WITH ANALOG AND DEVICENET® BOARDS INSTALLED	\$ 2,005
3200-1991	<u>CX-1010</u> DEVICENET® OPTION BOARD ONLY (requires external 5vdc)	\$ 395
3200-1992	<u>CX-1010</u> ANALOG OPTION BOARD 2-Channel Standard	\$ 315
3200-1993	<u>CX-1010</u> ANALOG OPTION BOARD 2-Channel Load Cell	\$ 315
3200-1994	<u>CX-1010</u> ANALOG OPTION BOARD, 1-Channel Load Cell, 1-Channel Standard	\$ 315
3200-2021	<u>CX-1010</u> TECHNICAL MANUAL (CD ROM - EXTRA COPIES)	\$ 15
0001-0131	<u>CX-1010</u> TECHNICAL MANUAL (HARD COPY)	\$ 75

PART NO.	DESCRIPTION	LIST PRICE
<u>M-SERIES</u>		
3200-1602	<u>M-TRIM UNIVERSAL DIGITAL CONTROL</u> Precision "Front End" for any AC or DC drive. Isolated input/output. Master or Follower mode with 4 presets, 6 limits/alarms, 3 frequency inputs, and RS422/RS485 computer link.	\$ 900
3200-1603	<u>M-TRIM WITH ANALOG IN/OUT OPTION INSTALLED</u>	\$ 1,050
3200-1607	<u>M-TRIM WITH INVERSE SET-POINT FUNCTION</u>	\$ 900
3200-1676	<u>M-DRIVE DC MOTOR CONTROL/DRIVE</u> Rated for up to 2HP, 180V Armature, 200V Field. (Stock configuration 1HP, 90V/100V with 120VAC supply . . . switch selectable for 2HP, 230VAC supply.) Control features similar to M-Trim.	\$ 925
3200-1677	<u>M-DRIVE WITH ANALOG IN/OUT OPTION INSTALLED</u>	\$ 1075
3200-1678	<u>M-DRIVE WITH INVERSE SET-POINT FUNCTION</u>	\$ 925
3200-1680	<u>ANALOG I/O OPTION CARD - M-SERIES</u> Retrofit M-Drive #3200-1676 or M-Trim #3200-1602 with this plug-in accessory board. Analog is assignable to 1 of 7 input variables; Analog out assignable to any (1) variable code. Signals can be jumper selected as 4-20 ma or 0-10VDC.	\$ 150
3200-1682	<u>COMPLEMENTARY ANALOG I/O CARD - M-SERIES</u> Same as 3200-1680 but an increasing signal input causes a decreasing motor speed.	\$ 150
3200-1931	<u>ML-TRIM UNIVERSAL DIGITAL CONTROLLER (115VAC)</u> Precision "Front End" for any AC or DC drive. Isolated Drive signal and optionally isolated signal I/O. Master or Follower mode with 2 presets each. RS485 Link.	\$ 565
3200-1932	<u>ML-TRIM UNIVERSAL DIGITAL CONTROLLER (230VAC)</u>	\$ 565
3200-1933	<u>ML-DRIVE DC CONTROLLER/DRIVE (115VAC)</u> Rated for 1HP 90V Arm. Control features similar to ML-Trim.	\$ 640
3200-1934	<u>ML-DRIVE DC CONTROLLER/DRIVE (230VAC)</u> Rated for 2HP 180V Arm.	\$ 640

PART NO.	DESCRIPTION	LIST PRICE
<u>M-SERIES - Continued</u>		
3200-1936	<u>MLP-TRIM UNIVERSAL DIGITAL/ANALOG CONTROLLER (115VAC)</u> Similar to ML-Trim but with 1 analog input useable for frequency, set point, or dancer trim. Zero-error in freq. follower mode, and other enhancements.	\$ 660
3200-1937	<u>MLP-TRIM UNIVERSAL DIGITAL/ANALOG CONTROLLER (230VAC)</u>	\$ 660
3200-1938	<u>MLP-DRIVE DC CONTROLLER/DRIVE - DIGITAL/ANALOG (115VAC)</u> Rated for 1 HP - 90V Arm. Control features similar to MLP-Trim.	\$ 735
3200-1939	<u>MLP-DRIVE DC CONTROLLER/DRIVE - DIGITAL/ANALOG (230VAC)</u> Rated for 2 HP 180V Arm.	\$ 735
3200-1740	<u>M-TRACK FULL SYNCHRONIZING CONTROL</u> Controls any AC/DC or Servo Drive to synchronize a slave machine in both speed and phase relative to the master.	\$ 1,650
3200-1820	<u>M-ROTARY SYNCHRONIZING CONTROL FOR ROTARY KNIFE/DRUM</u> Similar to M-TRACK but has engineering unit set points and electronic cam profile feature.	\$ 1,650
3200-1831	<u>M-CUT FEED-TO-LENGTH CONTROL</u> Incremental and absolute motion control for precise repeat lengths. Fast response for use with servo motors/amplifiers.	\$ 1,250
3200-1840	<u>M-SHUTTLE FOR FLYING CUT-OFF</u> Synchronized back-and-forth action for cut-off carriage drive.	\$ 1,650
3200-1841	<u>M-TRAVERSE LEVEL WIND OR WEB SCAN</u> Synchronized back-and-forth action with adjustable lay and width settings. Edge or Center based.	\$ 1,650
3200-1855	<u>OPEN-CHASSIS M-CUT CONTROLLER (MB-CUT)</u> With isolated power supply. Also includes DB9 cable assy and CONTREX-HOST Software with 1 st unit ordered.	\$ 900
3200-185X	<u>OPEN-CHASSIS M-SERIES CONTROLLER</u> M-Rotary, M-Track, M-Traverse, M-Shuttle functions in an open-chassis package. With isolated power supply. Also includes DB9 cable assy and CONTREX-HOST Software with 1 st unit ordered.	\$ 1,175

PART NO.	DESCRIPTION	LIST PRICE
----------	-------------	------------

3200-1860	PENDANT W/RIBBON CABLE FOR MB-SERIES OPEN CHASSIS CONTROLS Not required if laptop computer is available.	\$ 375
------------------	--	---------------

OPEN CHASSIS M-SERIES NOTE:

Custom software configuration possible. Contact factory with specifications/custom requirements or for Special Volume Discount.

COMPUTER/PHONE LINK ACCESSORY ITEMS FOR M-SERIES PRODUCTS

Built-in RS422/RS485 port. Instruction manual describes character format and message protocol. More than 50 parameters can be monitored or changed from host computer. Experienced programmers can write their own routines.

3200-2022	Contrex Host 3 CD - User Ready Software (Windows) Program allows user to command, change parameter, monitor, or save-to-file. Works with CX-1010, M-Series, MB-Series, ML-Series or MLP-Series.	\$ 250
------------------	---	---------------

NOTE: Windows DDE drivers are also available from 3rd party vendors.

MICRO-MODULES

3200-1800	MM100	COMMUNICATION CONVERSION DEVICE - RS232:RS422. Module has standard female DB-25 pin, RS232 receptacle and 4 screw terminals for RS422. Transmit/Receive LEDs verify operation. Snap-Track package. Adapts M-Series communication port to match host computer having RS232 port. Only one device required on multi-channel M-Series systems. Requires + 12VDC from M-Series Control. Optional isolation mode (isolation requires extra 5VDC source).	\$ 195
------------------	--------------	---	---------------

5200-0045		COMMUNICATION CONVERSION DEVICE - RS232:RS485 Module has standard female DB-25 pin RS232 receptacle and screw terminals for either RS422 or RS485. Transmission LED's verify operation. Requires 5 to 12VDC (available from CONTREX controllers).	\$ 195
------------------	--	---	---------------

PART NO.	DESCRIPTION	LIST PRICE
----------	-------------	------------

MICRO-MODULES - Continued

5200-0042	CDE-2	<u>CABLE ADAPTER - 9 PIN FEMALE TO 25 PIN MALE</u> Straight extension to match converters to computers having a 9 pin male plug serial port.	\$ 40
5200-0041	CDE-3	<u>CABLE ADAPTER - 9 PIN FEMALE TO 9 PIN MALE</u> To match MB-Series open chassis controller to computers having 9 pin male plug serial port. (No converter required.)	\$ 40
3200-1803	MM500	<u>8-CHANNEL OPTO-ISOLATION MODULE</u> For high-noise environments. Use for discrete inputs on M-Series controllers. (Not for use on high-freq. encoder inputs.)	\$ 160

SUPPRESSION

6003-5017		<u>QUENCHARC</u> Snubber for AC Coils and Supply Line. 100 ohm - 0.1 mfd.	\$ 4
6003-5015		<u>QUENCHARC</u> Snubber for low voltage Signal Lines. 22 ohm - 0.1 mfd.	\$ 4
6500-0020		<u>CORCOM LINE FILTER</u> For AC Supply Line 10 Amps @ 120, 8 amps @ 250	\$ 25
6500-0073		<u>CORCOM LINE FILTER</u> For AC Supply Line 20 Amps @ 120, 16 Amps @ 250	\$ 45

PART NO.	MODEL NO.	DESCRIPTION	LIST PRICE
----------	-----------	-------------	------------

E-DRIVE DC MOTOR CONTROLLER/DRIVE

3200-1100	ED-O	<u>E-DRIVE DC CONTROLLER</u> Open chassis for up to 1 HP, (90V) or 2HP (180V)	\$ 495
3200-1110	ED-1	<u>E-DRIVE DC CONTROLLER</u> with enclosure, 10T dial pot, no display.	\$ 745
3200-1120	ED-2	<u>E-DRIVE DC CONTROLLER</u> with enclosure, 10T pot, 4-digit display.	\$ 900
3200-1130	ED-3	<u>E-DRIVE DC CONTROLLER</u> with enclosure, man 10T pot, auto 10T pot, and master/follower select switch.	\$ 1,040
5800-1500	TCD-10T	<u>TURN COUNT 10T DIAL for ED-2</u>	\$ 60
3200-1150	SR241-4	<u>SPEED READ-OUT,</u> cable interconnect to ED-O Controllers.	\$ 295

MULTI-MOTOR SYSTEM ACCESSORIES

3200-1330	RC272	<u>MASTER RATIO OSCILLATOR AND FREQUENCY SCALER</u> Auto: 500 Hz in = 500 HZ out Manual: 0-500 Hz out (Specify other ranges)	\$ 375
3200-1200	VCO-1B	<u>MASTER OSCILLATOR OR ANALOG-TO-FREQUENCY CONVERTER</u> 0-500 Hz. Field selectable other ranges. Requires \pm 12VDC.	\$ 275

Above oscillators do not include operators potentiometers. Order separately.

SPEED POTS FOR RC272/VCO-1 OSCILLATORS

7120-1374	P10-10	<u>POT, 10T w/dial & 10 ft. cable (0.50%)</u>	\$ 170
7120-1390	P10A-10	<u>POT, 10T w/dial & 10 ft. cable (0.05%)</u>	\$ 380

PART NO.	MODEL NO.	DESCRIPTION	LIST PRICE
----------	-----------	-------------	------------

ACCESSORY CIRCUITS (Most require external \pm 12VDC to 15VDC power.)

3200-1170	PDC-1B	PULSE-TO-DC CARD/CONNECTOR Specify sensor type, input frequency. Output range is 4-20 ma.	\$ 175
3200-1175	PDC-3B	PULSE-TO-DC CARD/CONNECTOR Zero based or groundable output 0-5VDC or 4-20 ma. Specify sensor type and input frequency.	\$ 225
7300-0841	ADR-1	ACCEL-DECEL RAMP CARD/CONNECTOR 5-30 SECONDS.	\$ 195
3200-1180	DSS-1	DELTA-SPEED SWITCH Specify sensor type, frequency and trip range.	\$ 295
3200-1440	PDB-1	PRE-AMP/DIVIDE CARD For mag. pickups. Jumper Select divide by 1, 2, 4, 8, or 16.	\$ 195
5210-0013		POWER SUPPLY + 15VDC Open Chassis - 80 milliamps.	\$ 130

QUADRATURE RING KITS II NEW - 60T GEAR, 5-24VDC - OPEN COLLECTOR

7300-1600	QRK56C, 5/8" Bore w/Pull-up Resistor	\$ 165
7300-1601	QRK143TC, 7/8" Bore w/Pull-up Resistor	\$ 178
7300-1602	QRK182TC, 1-1/8" Bore w/Pull-up Resistor	\$ 255
7300-1603	QRK213TC, 1-3/8" Bore w/Pull-up Resistor	\$ 255
7300-1604	QRK254TC, 1-5/8" Bore w/Pull-up Resistor	\$ 255
7300-1605	QRK71D Metric Face, 14mm Bore w/Pull-up Resistor	\$ 260
7300-1610	QRK56C, 5/8" Bore w/o Pull-up Resistor	\$ 165
7300-1611	QRK143TC, 7/8" Bore w/o Pull-up Resistor	\$ 178
7300-1612	QRK182TC, 1-1/8" Bore w/o Pull-up Resistor	\$ 255
7300-1613	QRK213TC, 1-3/8" Bore w/o Pull-up Resistor	\$ 255
7300-1614	QRK254TC, 1-5/8" Bore w/o Pull-up Resistor	\$ 255
7300-1615	QRK71D Metric Face, 14mm Bore w/o Pull-up Resistor	\$ 260

QUADRATURE RING KITS II New- 60T GEAR, 5-24VDC - DIFFERENTIAL

7300-1620	QRK56C, 5/8" Bore	Line Driver Output	\$ 175
7300-1621	QRK143TC, 7/8" Bore	Line Driver Output	\$ 188
7300-1622	QRK182TC, 1-1/8"	Line Driver Output	\$ 265
7300-1623	QRK213TC, 1-3/8"	Line Driver Output	\$ 265
7300-1624	QRK254TC, 1-5/8"	Line Driver Output	\$ 265
7300-1625	QRK71D Metric Face, 14mm Bore	Line Driver Output	\$ 270

CONVERSION TABLE NEW PRODUCT NUMBERS VS OLD PRODUCT NUMBERS
--

**Quadrature Sensor Ring
Kits - 60 Tooth Gear - 5 to 15 VDC - Open Collector**

7300-1310	56C, 5/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1600
7300-1311	143TC, 7/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1601
7300-1312	182TC, 1-1/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1602
7300-1313	213TC, 1-3/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1603
7300-1314	254TC, 1-5/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1604
7300-1355	71D Metric, 14mm Bore, with Pull-up Resistor	Replaced by QRK II 7300-1605
7300-1315	56C, 5/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1610
7300-1316	143TC, 7/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1611
7300-1317	182TC, 1-1/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1612
7300-1318	213TC, 1-3/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1613
7300-1319	254TC, 1-5/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1614
7300-1357	71D Metric, 14mm Bore, without Pull-up Resistor	Replaced by QRK II 7300-1615

Quadrature Sensor Ring Kits - 60 Tooth Gear - 5 to 15 VDC - Differential

7300-1370	56C, 5/8" Bore, Line Driver Output	Replaced by QRK II 7300-1620
7300-1371	143TC, 7/8" Bore, Line Driver Output	Replaced by QRK II 7300-1621
7300-1372	182TC, 1-1/8" Bore, Line Driver Output	Replaced by QRK II 7300-1622
7300-1373	213TC, 1-3/8" Bore, Line Driver Output	Replaced by QRK II 7300-1623
7300-1374	254TC, 1-5/8" Bore, Line Driver Output	Replaced by QRK II 7300-1624
7300-1375	71D Metric, 14mm Bore, Line Driver Output	Replaced by QRK II 7300-1625

Quadrature Sensor Ring Kits - 60 Tooth Gear - 15 to 24 VDC - Open Collector

7300-1410	56C, 5/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1600
7300-1411	143TC, 7/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1601
7300-1412	182TC, 1-1/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1602
7300-1413	213TC, 1-3/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1603
7300-1414	254TC, 1-5/8" Bore, with Pull-up Resistor	Replaced by QRK II 7300-1604
7300-1415	71D Metric, 14mm Bore, with Pull-up Resistor	Replaced by QRK II 7300-1605
7300-1420	56C, 5/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1610
7300-1421	143TC, 7/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1611
7300-1422	182TC, 1-1/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1612
7300-1423	213TC, 1-3/8" Bore, without Pull-up Resistor	Replaced by QRK II 7300-1613
7300-1424	254TC, 1-5/8" Bore, with out Pull-up Resistor	Replaced by QRK II 7300-1614
7300-1425	71D Metric, 14mm Bore, without Pull-up Resistor	Replaced by QRK II 7300-1615

Product Number Change: Quadrature Speed Sensors

7200-0940, 7200-0942, 7200-0970, 7200-0972	Replaced with 7200-0990
7200-0941, 7200-0971, 7200-0945, 7200-0973	Replaced with 7200-0991
7200-0943, 7200-0946	Replaced with 7200-0992

PART NO.	MODEL NO.	DESCRIPTION	LIST PRICE
----------	-----------	-------------	------------

MAGNETIC PICK-UP KITS

Note: Only M-Trim, M-Drive, and E-Drive controls can use magnetic pick-ups. Other models require Quad Kits, Single Channel Kits, other Encoders, or Converter Kit 3200-1980.

7300-0980	RK56C	SENSOR KIT w/60T GEAR - 5/8 inch	\$ 99
7300-0982	RK143TC	SENSOR KIT w/60T GEAR - 7/8 inch	\$ 112
7300-0934	RK182TC	SENSOR KIT w/60T GEAR - 1-1/8 inch	\$ 175
7300-0936	RK213TC	SENSOR KIT w/60T GEAR - 1-3/8 inch	\$ 175
7300-0987	RK254TC	SENSOR KIT w/60T GEAR - 1-5/8 inch	\$ 175
7300-0981	RK56C-30	SENSOR KIT w/30T GEAR - 5/8 inch	\$ 117
7300-0983	RK143TC-30	SENSOR KIT w/30T GEAR - 7/8 inch	\$ 139
7300-0984	RK182TC-30	SENSOR KIT w/30T GEAR - 1-1/8 inch	\$ 195
7300-0985	RK213TC-30	SENSOR KIT w/30T GEAR - 1-3/8 inch	\$ 367

3200-1980	DUAL CHANNEL MAG PICK-UP CONVERTER		\$ 85
-----------	---	--	-------

Converts 2 magnetic pick-up signals into amplified square wave. Requires 5-12VDC (available from CONTREX controllers).

SPEED SENSORS Note: See page 8 for Product Number Cross Reference

7200-0990		QUADRATURE SENSOR 5-24VDC w/Pull-up Resistor - open collector	\$ 100
7200-0991		QUADRATURE SENSOR 5-24VDC w/o Pull-up Resistor - open collector	\$ 100
7200-0992		QUADRATURE SENSOR 5-24VDC Differential	\$ 110
7200-0940		QUADRATURE SENSOR 5-15VDC w/Pull-up Resistor - open collector <i>(Obsolete Available only while existing stock lasts.)</i>	\$ 120
5800-1410	SM3N	MAGNETIC PICKUP, Threaded	\$ 25
5800-1412	SM3N-A	MAGNETIC PICKUP, Smooth	\$ 25
6500-0038	SM5XP	MAGNETIC PICKUP, Explosion Proof ¹	\$ 595
5800-1413	SP8N3	PROX SENSOR, 3-wire ^{1&2}	\$ 160
3200-1340	ENC DR-600	ENCODER, 10V, 600 PPR	\$ 295
3200-1350	ENC DR-1200	ENCODER, 10V, 1200 PPR	\$ 295
3200-1341	QENC DR-600	ENCODER, 5V, 600 PPR, Quadrature, NPN	\$ 525
7000-0450	R56CXP	FLANGE RING ONLY, 56C, for SM5XP sensor	\$ 125

¹**NOTE:** These sensors require larger size targets . . . use with 30T gears only.

²**NOTE:** These sensors will fit in Flange Ring Sensor Kits (RK Kits). Order Sensor Kit "less sensor" and add special sensor/price as additional order line item.

PART NO.	MODEL NO.	DESCRIPTION	LIST PRICE
----------	-----------	-------------	------------

GEARS

5800-1700	G60T5	GEAR, 60T, 5/8 inch	\$ 25
5800-1701	G60T7	GEAR, 60T, 7/8 inch	\$ 38
5800-1702	G60T9	GEAR, 60T, 1 1/8 inch	\$ 45
5800-1703	G60T11	GEAR, 60T, 1 3/8 inch	\$ 45
5800-1704	G60T13	GEAR, 60T, 1 5/8 inch	\$ 45
7000-0376	G20T2	SPROCKET, 20T, 1/4 inch	\$ 60
5800-0382	G30T5	GEAR, 30T, 5/8 inch	\$ 40
5800-0383	G30T7	GEAR, 30T, 7/8 inch	\$ 65
5800-0347	G30T9	GEAR, 30T, 1 1/8 inch	\$ 68
5800-0348	G30T11	GEAR, 30T, 1 3/8 inch	\$ 240

DC DRIVES, REGEN, SINGLE PHASE

DC CONTROLLER for 1/8 - 5 HP, Regen, chassis only. Chassis is drive module only. Subplate, Armature Contactors, Pot, and Operator Devices are NOT included. Convertible unit is shipped in 230V configuration. (5 HP version is slightly larger chassis.)

		<u>HP</u>	<u>AMP</u>	<u>VOLTS</u>	<u>PRICE</u>
3200-1264	DF9P-10C	1	10	115	\$ 600
3200-1264	DF9P-10C	2	10	230	\$ 600
3200-1782	DF9P-15C	3	15	230	\$ 680
3200-1792	DF9P-25C	5	25	230	\$ 1,150

OTHER CONTREX PRODUCT LINES:

REFLEX PRODUCTS

Reflex model accessory and signal conditioning cards are available. Consult Price Sheet DS456 or contact factory.

SERVO MOTORS/AMPLIFIERS

Complete line of Brushless DC servo motors and amplifiers available as modules or as complete kits. Consult Price Sheet DS410 or contact factory.

ADDITIONAL INFORMATION:

Check our Web Site for Technical and Application Information for our most popular controller models.

Web Site: www.contrexinc.com

E-Mail: info@contrexinc.com