

Model AR2 Robot

BILL OF MATERIALS

Printed Components

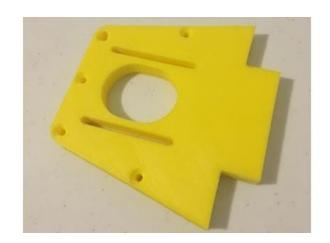
- Components printed out of ABS
- Printed with thick shells
- Printed 2mm thick layers
- Unless otherwise noted most parts printed 50% solid
 - (spindles and stress bearing components printed 100% solid)



J1 base plate part 1



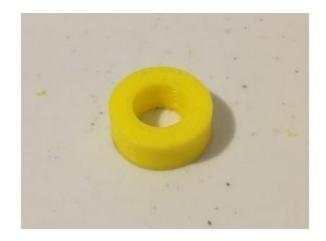
Base support part $\, {\sf I} \,$



J1 base plate part 2



Base support part 2



J1 alignment plug



J1 turret housing

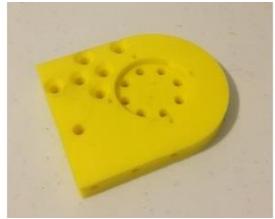


J1 spindle



J2 turret housing





J1 platform



J1 motor mount

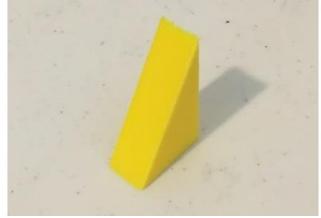


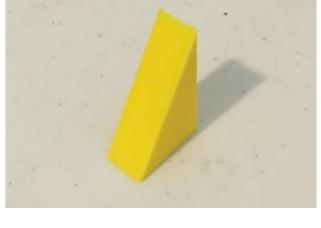
J2 arm parts 1 and 2



J2 spindle (PRINT SOLID)







J1 auxiliary support wedge



J2 motor support



J2 retainer (PRINT SOLID)

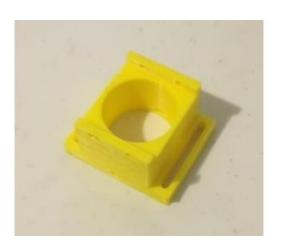


J2 spring housing (PRINT SOLID)

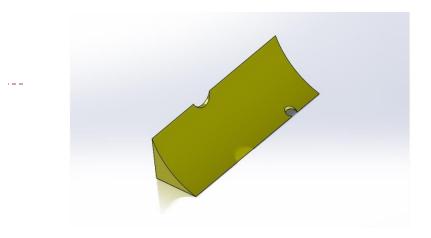




J2 spring housing auxiliary support



J3 motor mount



J1 platform auxiliary support



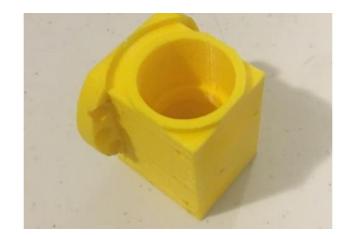
J3 bearing cup



J3 spindle (PRINT SOLID)



J3 spindle retainer (PRINT SOLID)



J4 turret housing



J5 motor mount





J4 driven pulley



J5 housing

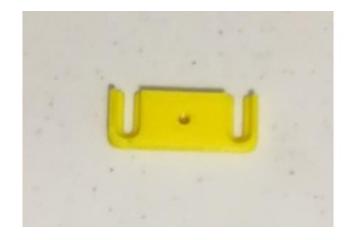


J4 motor mount

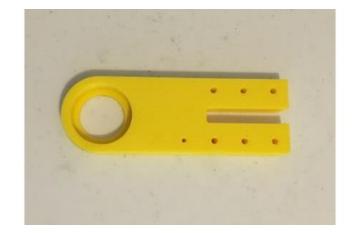


J5 carrier (PRINT SOLID)





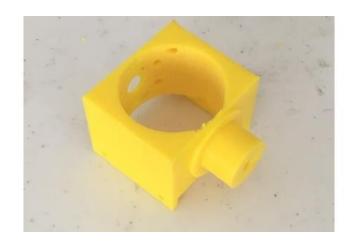
J5 idler tension block



J5 bearing support arm



J5 idler post



J6 turret housing



J6 spindle J6 bearing cap

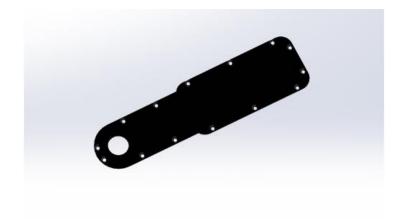






J5 side spacers





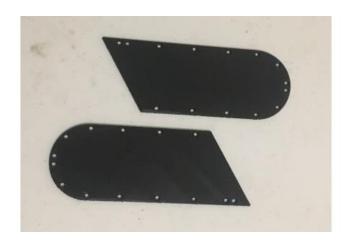
J5 side cover cap



J3 side cover spacers

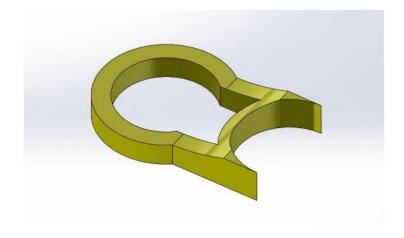


J6 gripper mount



J3 side cover caps





J2 arm auxilliary support

Stepper Motors

 Geared and linear stepper motors as well as stepper drivers are available from Stepper Online http://www.omc-stepperonline.com/

The aluminum version uses 3 precision and 3 economy series motors:

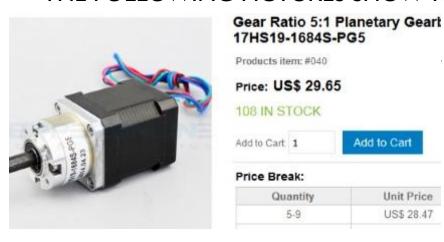
- || = SKU: 17HS15-1684S-HG5
- |2 = SKU: 23HS22-2804S-HG50
- |3 = SKU: 17HS15-1684S-HG50
- J4 = SKU: I I HS20-0674S-PG5
- J5 = SKU:17LS19-1684E-200G
- J6 = SKU:14HS13-0804S-PG19

The printed version uses all 6 economy series motors:

- || = SKU: |7HS|9-|684S-PG5
- |2 = SKU: 23HS30-2804S-PG47
- |3 = SKU: 17HS19-1684S-PG19
- J4 = SKU: I I HS20-0674S-PG5
- J5 = SKU:17LS19-1684E-200G
- J6 = SKU:14HS13-0804S-PG19

I used economy series motors when building the printed robot and then upgraded the aluminum robot to use precision series motors for JI, J2 and J3. I included the 3 motor mount print files so that you can build the printed robot either way. I would recommend the precision series motors if possible.

THE FOLLOWING PICTURES SHOW THE ECONOMY SERIES MOTORS ONLY





Gear Ratio 47:1 Planetary G
23HS30-2804S-PG47

Products item: #0282

Price: US\$ 62.08

15 IN STOCK

Add to Cart: 1 Add to Cart

Price Break:

Quantity Unit Pri

J1 motor J2 motor



Gear Ratio 19:1 Planetary Gearbox High Ton 17HS19-1684S-PG19

Products item: #042

Price: US\$ 29.65

44 IN STOCK

Add to Cart: 1 Add to Cart

Price Break:

Quantity	Unit Price	Save
5-9	US\$ 28.47	4 %
10-49	US\$ 27.28	8 %
50-99	US\$ 26.10	12 %



Gear Ratio 5:1 Planetary Gearbox With Nem 11HS20-0674S-PG5

Products item: #033

Price: US\$ 34.68

5 IN STOCK

Add to Cart 1 Add to Cart

Price Break:

Quantity	Unit Price	Save
5-9	US\$ 33.29	4 %
10-49	US\$ 31.91	8 %
50-99	US\$ 30.52	12 %

J3 motor J4 motor



Threaded Rod Nema 17 External Lin 200mm T8 x 8

Products item: #0226

Price: US\$ 39.41

32 IN STOCK

Add to Cart: 1 Add to Cart

Price Break:



Gear Ratio 19:1 Planetary 14HS13-0804S-PG19

Products item: #0137

Price: US\$ 32.34

O IN STOCK

Add to Cart Add to Cart: 1

Price Break:

Quantity Unit P

17LS19-1684E-200G



184 IN STOCK

Add to Cart 1

Price Break:

Quantity	Unit Price	Save
5-9	US\$ 3.14	9 %
10-49	US\$ 2.82	18 %
50-99	US\$ 2.51	27 %
100+	US\$ 2.20	36 %

G+1 0





J4 motor mount bracket



Drivers

Drivers are available from Stepper Online http://www.omc-stepperonline.com/

The aluminum version used (5) digital DM-542T drivers and (1) digital DM320Tdriver:

Digital Stepper Driver 1.0-4.2A 20-50VDC for Nema 17, 23, 24 Stepper Motor

**** 5 reviews | Write a review

SKU: DM542T

\$24.21 \$32.66

Bulk quantity price break:

Qty 3 10 30 100

Price \$23.41 \$22.60 \$21.79 \$20.99

Save 28% 31% 33% 36%



Digital Stepper Driver 0.3-2.2A 18-30VDC for Nema 8, 11, 14, 16, 17 Stepper Motor

***** 1 reviews | Write a review

SKU: DM320T

\$14.38 \$19.40

Bulk quantity price break:

Qty 3 10 30 100

\$12.74

The printed version used (6) analog ST-6600 drivers:





Bearings







Qty. (2) for J1 bearings - Amazon

Uxcell 30204 Single Row 47mm
Outside Diameter 14mm Thick To

Roller Bearing

Be the first to review this item

Price: \$8.30 & FREE Shipping

Note: Not eligible for Amazon Prime. Available with fi shipping from other sellers on Amazon.

Only 3 left in stock.

Get it as soon as Feb. 27 - March 2 when you choo Expedited Shipping at checkout.



Qty. (2) for J2 bearings - Amazon

Thrust Needle Roller Bearing 35x52x4 Thrust Bearing
Be the first to review this item

Price: \$7.64 Prime

Note: Available at a lower price from other sellers, potentially without free Prime shi
Only 6 left in stock (more on the way).
Want it Thursday, Feb. 23? Order within 15 hrs 29 mins and choose One-Day SI
Details
Ships from and sold by Amazon.com.
New (2) from \$5.77 & FREE shipping.

Specifications for this item

Part Number Kit8675
Brand Name VXB

Qty. (1) for J3 bearing - Amazon

Qty. (1) 35mm thrust bearing and washer set for J3 - Amazon



Thrust Needle-Roller Bearing

for 1" Shaft Diameter, 1-9/16" OD



Each In stock \$3.17 Each 5909K36

You ordered 4 each on 01/28/17.

0.032" Thick Washer for 1" Shaft Diameter Thrust N



Qty.(3) 1" thrust bearings (2 for J4 and 1 for J6) – McMaster Carr

Qty.(4) (3 for J4 and 1 for J6) – McMaster Carr

0.126" Thick Washer for 1" Shaft Diameter Thrust I



Each
ADD TO ORDER

In stock \$5.00 Each 5909K63

You ordered 2 each on 01/28/17.

RoHS Not Compliant

Qty.(2) (1 for J4 and 1 for J6) – McMaster Carr



by Koyo

Koyo B-1616 Needle Roller Bearing, Full Compleme Cup, Open, Inch, 1" ID, 1-1/4" OD, 1" Width, 4300rp Rotational Speed, 16700lbf Static Load Capacity, 76 Dynamic Load Capacity

★★★★ * 4 customer reviews

Price: \$9.71 *Prime*

Note: Available at a lower price from other sellers, potentially without free Prime shi

In Stock.

Want it Tuesday, Feb. 28? Order within 4 hrs 19 mins and choose Two-Day Ship Details

Ships from and sold by Amazon.com.

New (5) from \$1.71 + \$6.15 shipping

Qty.(2) for J4 bearings - Amazon





SKF HK 1612 Needle Roller Bearing, Caged Drawn C Ring and Roller, Open, 16mm Bore, 22mm OD, 12m Want it Monday, Feb. 20? Order within 11 hrs 48 mins and choose One-Day Shipp

10Pcs 150 x 3mm Stainless Steel Cylinder Linear F Rod Shaft ★★★★★ 4 customer reviews Price: \$7.50 Prime In Stock. Want it Thursday, March 9? Order within 2 hrs 23 mins and choose Two-Day St checkout. Details Sold by uxcell and Fulfilled by Amazon. Gift-wrap available. Product Name: Round Rod; Size: 150x 3mm / 5.9"x 0.12"(L*D) · Material : Stainless Steel · Color : Silver Tone

Qty. (1) for J5 belt idler - Amazon

Qty.(1) set of 10 shafts (you only need 2) - Amazon

Weight: 83g









uxcell 10 Pcs 688Z Metal Sealed Deep Groove Radial B x 16 x 5mm * 4 customer reviews Price: \$8.91 Prime Only 15 left in stock. Want it Thursday, March 9? Order within 13 hrs 23 mins and choose One-Da Details Sold by uxcell and Fulfilled by Amazon. Gift-wrap available. New (2) from \$7.79 & FREE shipping. Specifications for this item

Qty.(1) set of 8 bearings (you only need 2) - Amazon

Qty.(1) set of 10 bearings (you only need 1) - Amazon





30203 Taper Roller Wheel Bearing: 17x40x12 VXB Brand

Be the first to review this item

Price: \$6.55

Note: Not eligible for Amazon Prime.

In Stock.

Get it as soon as March 27 - 30 when you choose Exp

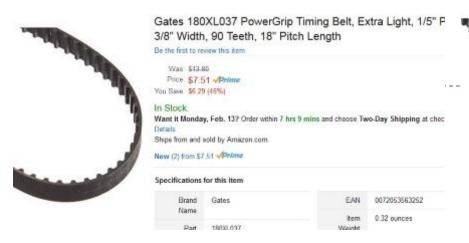
checkout.

Ships from and sold by VXB Bearing.

AT ANY MARK A PARTY IN A

Qty.(1) for J6 bearing - Amazon

Belts - Sprockets



Qty. (1) J1 belt - Amazon



Qty (1) J3 belt – or use chain option instead (see instructions) - Amazon



2' length – J3 chain option (see instructions) – McMaster Carr

Qty.(1) link for J3 – McMaster Carr





Gates 150XL037 PowerGrip Timing Belt, Ex Pitch Length Sold by: Amazon.com LLC Return window closed on Mar 18, 2017 \$6.79

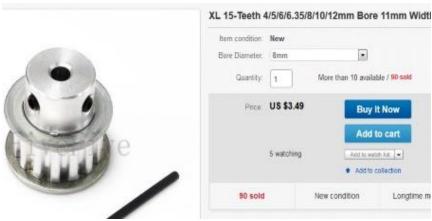
Buy it Again

Qty.(1) J4 belt – Amazon





Qty.(1) driven pulley for J1 – Amazon



Qty.(4) 15 tooth 8mm bore sprocket (1 for J1 - 2 for J3 if using belt option and 1 for J6) - Ebay

Machinable-Bore Sprocket

for ISO #04B Roller Chain, 6mm Pitch, 13 Teeth



Each

In stock \$12.45 Each 2302K72

ADD TO ORDER

2 each added to your order. Ships in the morning (from our Chicago warehouse)



2PCS 10 Tooth 6mm Bore XL Type Aluminum Timii

\$3.46 Buy It Now

From China



Qty.(2) for J3 chain option – McMaster Carr

Qty.(1) for J4 - Ebay



Hardware

Steel Compression Spring

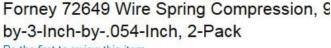
Zinc-Plated Music Wire, 2.00" Long, 845" OD, 080" Wire





ADD TO ORDER

In stock \$7.80 per p 9657K401



Be the first to review this item

Price: \$10.00 (\$5.00 / Pack) Prime

Only 2 left in stock (more on the way).

Want it Tuesday, March 7? Order within 32 mins and choose Two-Details

Ships from and sold by Amazon.com. Gift-wrap available.

- Used in light industry
- · Zinc plated steel wire compression spring
- Baked for a rust resistant finish and heat treated for performance;

Qty.(1) – McMaster Carr

Qty.(1) - McMaster Carr

Metric Key Stock

Undersized, Steel, 2mm x 2mm, 12" Length





You ordered 1 each on 01/20/17.

Material	Steel
Size	2 × 2 mm
Length	12"

Metric Key Stock

Oversized, Zinc-Plated Steel, 4mm x 4mm, 12" Long



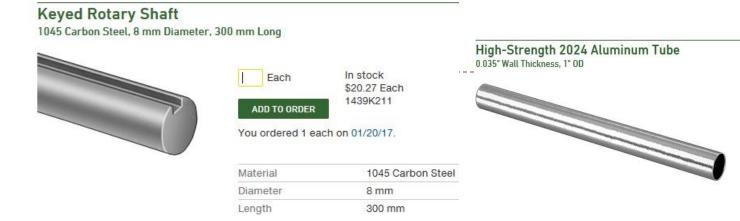


You ordered 1 each on 02/09/17.

Qty.(1) – McMaster Carr

Qty.(1) – McMaster Carr





Qty.(1) McMaster Carr



Qty. (4) spacers purchased at hardware store these are 3/8" x 3/16" x 1" cut down to 15mm long

Qty.(1) McMaster Carr

Metric Heavy Duty Ball Joint Linkage

M6 x 1 RH Thread Male Stud with Right-Hand Thread Female Sha

Length, ft.





In stock \$10.79 Each 6275K53

Each

ADD TO ORDER

In stock \$10.53 Each 1968T17

Qty.(1) McMaster Carr





uxcell

uxcell M4x55mm Fully Thread Hex Socket Hea Cap Screw Bolt Black 10pcs

Be the first to review this item

Price: \$11.15 \(\textit{Prime} \)

In stock on April 24, 2017.

Order it now.

Sold by uxcell and Fulfilled by Amazon. Gift-wrap available.

- Drive Type: Hex Socket Cap Head; Head Style: Socket Cap Head; Materi
- Package Content: 10pcs x Hex Socket Cap Screw; Product Name: Hex S Thread Size: M4 x 55mm/0.16" x 2.2"(D*L)
- · Weight: 49g; Main Color: Black; Thread Pitch: 0.7mm
- Total Length: 59mm/2.3"; Thread Style: Fully Thread
- Grade: 14.9; Hex Width: 3.5mm/0.14"
- > See more product details

Alloy Steel Shoulder Screw

8 mm Diameter x 14 mm Long Shoulder, M6 x 1 mm Thread Size





ADD TO ORDER

In stock 1-4 Each \$2.94 5 or more \$2.50 92981A151

Qty.(1) set of 10 (you only need 4) - Amazon

Qty.(2) - McMaster Carr

Square Head Extended Point Set Screw

Alloy Steel, M8 x 1.25 Thread, 25mm Long





ADD TO ORDER

In stock \$5.52 per pack 92635A314

Alloy Steel Shoulder Screw

8 mm Diameter x 80 mm Long Shoulder, M6 x 1 mm Thread Size



Each

ADD TO ORDER

In stock 1-4 Each \$3.93 5 or more \$3.33 92981A230

You ordered 4 each on 12/13/16.

Qty.(1) – McMaster Carr

Qty.(1) – McMaster Carr



Zinc-Plated Steel Tee Nut Inserts for Wood

M8 x 1.25 mm Thread Size, 11 mm Long





In stock \$9.44 per pack of 50 98965A410

Qty.(1) M8 – T nut – Hardware store is more cost effective for a single piece than buying multiple from McMaster Carr



SCREWS:

(hardware store or order from McMaster Carr)

QTY	ITEM
7	M3 x 10 flat head screws
4	M3 x I0 set screws
12	M3 x 14 socket head cap screws
14	M3 x I4 socket head cap screws
44	M3 x 25 flat head screws
5	M3 x 3 set screws
28	M3 x 35 flat head screws
9	M3 x 6 set screws
l	M3 x 6 socket head cap screw
6	M3 x 8 socket head cap screws
8	M4 nuts
16	M4 washers
4	M4 x 10 button head screws
4	M4 x 10 cap screws
16	M4 x 10 flat heads
24	M4 x 10 set screws
23	M4 x 10 socket head cap screws
2	M4 x I4 flat head screws
12	M4 x 20 socket head cap screws
4	M4 x 35 socket head cap screws
2	M4 x 6 set screws
31	M6 x 14 socket head cap screws
15	M6 x 18 flat head screws

Electrical Components



Qty.(1) - Amazon

91919 91919 91919

uxcell Switch Power Supply Driver for LED Strip 110/220V 5V 2A 10W

Only 9 left in stock.
Want it Sunday, Feb. 26? Order within 37 mins and choose Two-Day Shipi

Sold by uxcell and Fulfilled by Amazon. Gift-wrap available.

Size: DC 5V 2A 10W

 DC 5V 2A 10W
 DC 5V 3A 15W
 DC 5V 5A 25W
 DC 5V 8A 4

 DC 5V 10A 50W
 DC 5V 12A 60W
 DC 5V 20A 100W
 DC 5V

Qty.(1) – Amazon

Price: \$6.25 + \$5.95 shipping

Note: Not eligible for Amazon Prime.

In Stock

Get it as soon as Feb. 16 - 22 when you choose Standard at a Ships from and sold by Parts Express.

New (2) from \$6.25 + \$5.95 shipping

Specifications for this item

Brand Name Hammond

JBtek 8 Channel DC 5V Relay Module for Arduino F Pi DSP AVR PIC ARM

by JBtek

★★★★ 147 customer reviews | 42 answered questions

Price: \$8 98 Prime

In Stock.

Want it Monday, Feb. 27? Order within 17 hrs 37 mins and choose Two-Day Sh checkout. Details

Sold by JBtek and Fulfilled by Amazon. Gift-wrap available.

- . 5V 8-Channel Relay interface board, and each one needs 15-20mA Driver Curre
- . Equiped with high-current relay, AC250V 10A; DC30V 10A
- Standard interface that can be controlled directly by microcontroller (Arduino, 8 DSP, ARM, ARM, MSP430, TTL logic)
- · Indication LED's for Relay output status



Qty.(3) - Amazon

Phanteks 24 Pin M/B Premium Sleeved E 19.68" Length, Black/Red(PH-CB24P_BF

List Price: \$16.99 Price: \$14.99 Prime

You Save \$2.00 (12%)

j Your cost could be \$9.99 Qualified customers get \$5 in Gift Card fu Amazon Gift Card Balance, Learn more

Only 20 left in stock (more on the way).

Want it Tuesday, Feb. 14? Order within 4 hrs 34 mins and choo: checkout. Details

Ships from and sold by Amazon.com. Gift-wrap available.

Color Black/Red



Qty.(1) - Amazon

Switching Power Supply 350W 24V 14.6A for CNC Router S-350-24

Products item: #0177

Price: US\$ 26.35

326 IN STOCK

Add to Cart: 1

Add to Cart

Price Break:

Quantity	Unit Price	Save
5-9	US\$ 25.52	3 %
10-49	US\$ 24.70	6 %
50-99	US\$ 23.88	9 %

Arduino Mega Case Enclosure New Black Computer B with Switch

by SB Components

* 8 customer reviews

Price: \$6.99 Free shipping for Prime members when buying this Add-on Item. Detail

i Your cost could be \$1.99: Reload \$100, get \$5 free. Learn more

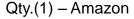
In Stock

Want it Monday, Feb. 27? Add it to a qualifying order within 17 hrs 39 mins and choos Two-Day Shipping at checkout. Details

Sold by SB Components and Fulfilled by Amazon. Gift-wrap available.

- . This is a no-nonsense protective case designed specifically for the Arduino Mega 256
- . The case is a two-piece injection-molded ABS enclosure that snaps together around Arduino. Holds the Arduino firmly in place

Qty.(1) - Stepper Online





Ieik Mega 2560 R3 ATmega2560-16AU + ATMEGA16 USB Cable for Robot Arduino UNO MEGA2560 R3 Duemilanove 2013

by IEIK

★★★★ ▼ 89 customer reviews | 7 answered questions

Price: \$11.89 /Prime

In Stock.

Want it Sunday, Feb. 26? Order within 1 min and choose Two-Day Shipping at ch

Sold by Smileshopper and Fulfilled by Amazon. Gift-wrap available.

- . Our development boards and modules are compatible with the Arduino
- 1 x IEIK Mega 2560 R3 Bule
- 1 x USB Cable

by BUD Industries

BUD Industries NBX-32926-PL ABS Plastic Internal Panel. 14-1/4" Length x 10-27/64" Width x 9/64" Thick, for NBF Series Boxes

★★★★★ 3 customer reviews

Price: \$20.10 Prime

In Stock

Want it Sunday, Feb. 26? Order within 39 mins and choose Two-Day Shipping at checkout. Details Ships from and sold by Amazon.com.

New (3) from \$20.10 Prime

Specifications for this item

Part NBX-32926-PL Number

Material Plastic Type

Qty.(1) - Amazon

Qty.(1) - Amazon





by BUD Industries BUD Industries NBF-32026 Plastic ABS NEMA Economy Box

with Solid Door, 15-47/64" Length x 11-51/64" Width x 6-9/32" Height, Light Gray Finish



15 Pcs 35mm Width Slotted Design Aluminum DIN 9.8"



a12022900ux0297

Part Number

Qty.(1) – Amazon

Qty.(1) - Amazon







Qty.(1) – Amazon



Red 16pc 22 AWG Wire wit .187 Quick Disconnect

\$7.25

Brand Focus Attack

SKU RED-187MWIREQCD16

Weight 3.25 Ounces

Availability Ships within 1-2 business days

Please note that FA Plexworks orders ship within 7 business da

Shipping Calculated at checkout



16pc 22 AWG Wire with .187 **Ouick Disconnect**

***** (6)

\$7.25

Brand Focus Attack

SKU 187MWIREQCD16

Weight 3.25 Ounces

Availability Ships within 1-2 business days

Please note that FA Plexworks cur orders ship within 7 business days linfo



Qty.(1) - Amazon

uxcell AC 600V 10A Red Mushroom Emergency Stop Button Switch 22mm NO NC

* 33 customer reviews | 5 answered questions

Price: \$6.94 Prime

In Stock.

Want it Tuesday, May 16? Order within 11 hrs 22 mins and choose Two-Day Shippi

Sold by uxcell and Fulfilled by Amazon. Gift-wrap available.

- . Item Name: Emergency Stop Push Switch; Type: Self Locking Rotary; Ith: 10A
- Ui: 600V; Voltage Category: AC 125V, 5A; AC 300V, 3A; Button Diameter: 4cm/1.!
- Contact Type: 1 NO (Normally Open) + 1 NC (Normally Closed); Mount Hole Diam / 0.87"(7/8");Fit Panel Thickness(Adjustable): Max 0.6cm / 0.24"
- Size: 3.7 x 3 x 7cm/ 1.4" x 1.2" x 2.8"(L*W*H); Material: Plastic and Metal; Main Co Fuchsia, Blue, Gray
- Net Weight: 45g;Package Content: 1 x Emergency Stop Switch

> See more product details



Qty.(1) - Amazon

URBEST Inlet Module Plug 5A Fuse Switch UR an Certification Male Power Socket 10A 250V 3 Pin IE

by URBEST®

★★★★☆ ▼ 91 customer reviews | 15 answered questions

Price: \$5.98 FREE Shipping for Prime members once available Details *

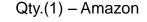
Sold by iauto and Fulfilled by Amazon. Gift-wrap available.

- Total Size: 5.8 x 4.8 x 3.4cm / 2.3" x 1.9" x 1.3"(LxWxH); Plug Type: 3 Pin IE
- . Product Name: Power Socket w Switch Fuse; Material (External): Plastic, Me Silver Tone, Silver Tone
- . Weight: 24g;Package Content: 1 x Power Socket
- Hole Center Distance: 3.9cm / 1.5":Bottom Size: 4.7 x 2.7cm / 1.9" x 1.1"(L) and CE certification
- Voltage/ Current: 10A, 250V AC; Hole in Top Face Diameter: 0.42cm / 0.16";

New (1) from \$5.98 Prime









Shrink Ratio *** * 205 customer reviews | 3 answered questions

Price: \$12.99 Sale: \$6.99 /Prime You Save: \$6.00 (46%)

Want it Tuesday, Feb. 14? Order within 4 hrs 30 mins and choose Two-Day Shippin

JawayTool 127 Pieces Assortment Heat Shrink Tube V Wrap Kit Electrical Connection Cable Sleeve Tubing S

With Durable Storage Case - Assorted Diameters- 2:1

Sold by M.Y House and Fulfilled by Amazon. Gift wrap available.

Size Name: Heat Shrink

Heat Shrink

Heat Shrink + Helping Hand

Qty.(1) – Amazon



Smraza 120pcs Multicolored Jumper Wire Female, 40pin Male to Male, 40pin Female Breadboard Jumper Wires Ribbon Cables connections S02

★★★★★ ▼ 10 customer reviews

Price: \$7.99 \(\textit{Prime} \)

In Stock.

Want it Thursday, March 9? Order within 2 hrs 26 mins and choos checkout Details

Sold by SmrazaDirect and Fulfilled by Amazon. Gift-wrap available.

. Multicolored 3 pieces Breadboard Jumper Wires as a set, High-gr





Actuator Type : Straight Hinge Lever;

Qty.(1) - Amazon



Qty.(2) – Amazon

OdiySurveil

OdiySurveil (TM) XV-152-1C25 Hinge Lever Micro Switch(Pack of 5)

* 15 customer reviews | 4 answered questions

Price: \$8.29 \(\textit{Prime} \)

In Stock.

Want it Friday, April 21? Order within 3 hrs 24 mins and choose Two-L Details

Sold by Overseasymall and Fulfilled by Amazon. Gift-wrap available.

Product Name: Micro Switch; Model No.: XV-152-1C25;



25 x Black Nylon Plastic P Clips - Fasteners for Cable, Tubing & Sleeving [16mm]

常常含含含 ▼ 1 customer review

Price: \$8.00 & FREE Shipping

Note: Not eligible for Amazon Prime.

In Stock.

Get it as soon as May 9 - 12 when you choose Expedited Shipping at chec Ships from and sold by Homesmart-uk.

Size: Ø 16mm

Qty.(1) – Amazon



UGREEN Ethernet Extension Cable Network Patch Cable RJ45 Cords Shielded Male to Fe Connector, 1.5ft/0.5m

★★☆☆ * 182 customer reviews | 5 answered questions

Sale: \$5.59 Prime

¿ Your cost could be \$0.59 Qualified customers get \$5 in Gift Card funds on! Amazon Gift Card Balance Learn more.

In Stock.

Want it Tuesday, Feb. 14? Order within 4 hrs 37 mins and choose Twocheckout. Details

Sold by UGREEN GROUP LIMITED and Fulfilled by Amazon. Gift-wrap as

Size 1.5ft

1.5ft 3ft \$5.59 \dagger 38.99

-(Drinne

6ft \$7.55 -(Dolour 10th \$8.55 vill*New

Qty.(2) - Amazon

SV-166-1C25 Limit Switch Long Hinge Roller A Action 3-16A 250VAC (10 pieces)

Price:
Note:
Only
Get it

Price: \$7.56 (50.76 / Item) + \$4.49 shipping

Note: Not eligible for Amazon Prime.

Be the first to revew this item

Only 2 left in stock - order soon.

Get it as soon as Feb. 14 - 17 when you choose Expedited Shipping at Ships from and sold by Standard Supply Co.

New (1) from 57.55 + \$4.49 shipping

Specifications for this item

Brand Name Yueqing Saigo Electronics



ASI ASIUK5N Din Rail Mounted Terminal Block, Screw Clamp (Pack of 50)

★★★★ ▼ 4 customer reviews

List Price: \$24.42

Price: \$21.01 (\$0.42 / DIN Rail Terminal) Prime

You Save: \$3.41 (14%)

In Stock.

Want it tomorrow, Feb. 26? Order within 11 hrs 11 mins and choose One-Day Shipping at checkor

Ships from and sold by Amazon.com. Gift-wrap available.

Used & new (4) from \$15.76 Prime

Specifications for this item

Part ASIUK5N

Current Amp

Qty.(1) - Amazon

Qty.(1) - Amazon



Automation Systems Interconnect

ASI ASIEB106 Din Rail Terminal Blo Bridge (Pack of 10)





Price: \$21.60 (\$2.16 / Din Rail Terminal) Prime

In Stock.

Want it Monday, May 29? Order within 2 hrs 10 mins an Shipping at checkout. Details

Ships from and sold by Amazon.com. Gift-wrap available

Qty.(1) – Amazon (The ASI terminal blocks list this as the correct jumpers but I had screw type on hand shown in manual)

Gripper



SMC MHF2-8D1 Parallel Air Gripper



Baomain Pneumatic Air Control Solenoid Valve 4V210-08 DC24V 5 Way 2 Position PT1/4" Internally Piloted Acting Type Single Electrical Control

by Baomain

More Buying Choices \$11.69 (2 new offers)

Product Features

... Pneumatic Solenoid Valve ... 5 Way; Power Consumption : I 24V ...