## **HYPERBOLOID CONTACTS**











IEH Quality Statement
Listening to our customers and meeting their needs while continuously improving our processes and services



# CONTENTS HYPERBOLOID CONTACTS

PAGE	THE ENDOLOID CONTACTO
3	Introduction
4	Specifications-1
5	Specifications-2
6	1200 Series Socket - Accepts Ø0.30 mm (0.012") Mating Pin
7	1200 Series Pin - Ø0.30 mm (0.012")
8	1600 Series Socket - Accepts Ø0.40 mm (0.016") Mating Pin, 1600 Series Pin - Ø0.40 mm (0.016")
9	1800 Series Socket - Accepts Ø0.45 mm (0.018") Mating Pin
10	1800 Series Pin - Ø0.45 mm (0.018")
11	2300 Series Socket - Accepts Ø0.58 mm (0.023") Mating Pin
12	2300 Series Pin - Ø0.60 mm (0.023")
13	2700 Series Socket - Accepts Ø0.69 mm (0.027") Mating Pin
14	3000 Series Socket - Accepts Ø0.030" (0.76 mm) Mating Pin
15	3000 Series Socket - Accepts Ø0.030" (0.76 mm) Mating Pin
16	3000 Series Pin - Ø0.030" (0.76 mm)
17	4000 Series Socket - Accepts Ø0.040" (1 mm) Mating Pin
18	4000 Series Socket - Accepts Ø0.040" (1 mm) Mating Pin
19	4000 Series Pin - Ø0.040" (1 mm)
20	5900 Series Socket - Accepts Ø1.50 mm (0.059") Mating Pin
21	5900 Series Pin - Ø1.50 mm (0.059")
22	6200 Series Socket - Accepts Ø0.062" (1.57 mm) Mating Pin
23	6200 Series Pin - Ø0.062" (1.57 mm)



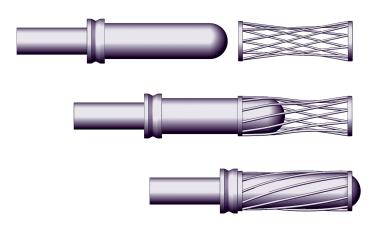
# CONTENTS HYPERBOLOID CONTACTS

PAGE	HYPERBOLOID CONTACTS
24	7800 Series Socket - Accepts Ø2.00 mm (0.078") Mating Pin
25	9300 Series Socket - Accepts Ø0.093" (2.36 mm) Mating Pin
26	9800 Series Socket - Accepts Ø0.098" (2.50 mm) Mating Pin
27	9800 Series Pin - Ø0.098" (2.50 mm)
28	1180 Series Socket - Accepts Ø3.00 mm (0.118") Mating Pin 1250 Series Socket - Accepts Ø0.125" (3.18 mm) Mating Pin
29	1380 Series Socket - Accepts Ø3.50 mm (0.138") Mating Pin
30	1380 Series Socket - Accepts Ø3.50 mm (0.138") Mating Pin
31	1380 Series Pin - Ø3.50 mm (0.138")
32	1420 Series Socket - Accepts Ø3.60 mm (0.142") Mating Pin 1575 Series Socket - Accepts Ø4.00 mm (0.157") Mating Pin
33	1690 Series Socket - Accepts Ø4.30 mm (0.169") Mating Pin
34	1690 Series Pin - Ø4.30 mm (0.169")
35	2541 Series Socket - Accepts Ø6.12 mm (0.241") Mating Pin
36	2541 Series Pin - Ø6.12 mm (0.241")
37	3150 Series Socket - Accepts Ø8.0 mm (0.315") Mating Pin
38	3570 Series Socket - Accepts Ø0.357" (9.07 mm) Mating Pin
39	5000 Series Socket - Accepts Ø0.500" (12.7 mm) Mating Pin
40	Crimp Tool, Positioner, Insertion tool & Removal Tool

#### HYPERBOLOID CONTACTS

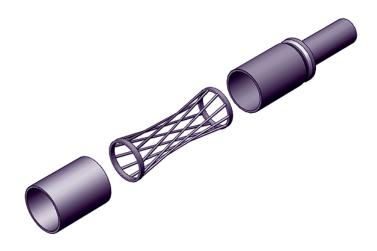


The HYPERBOLOID contact is an advanced design that satisfies performance requirements previously considered impossible. Radically different in concept, it is used in connectors having the highest standards of performance. The distinguishing feature of the HYPERBOLOID socket is the hyper-boloid-shaped sleeve formed by straight wires strung at an angle to the longitudinal axis. Viewed from the side, you see a curve defined by a series of apparent short straight line segments which are tangent lines to points along a hyperbolic curve. This geometry provides for a design which has a decreasing circumscribed circle when viewed from the entry. It begins larger than the pin acceptance diameter and is less than this same diameter at the center. When the pin is inserted into this sleeve, the wires stretch, well within elastic limits, to accommodate it. In so doing, the wires wrap themselves around the pin providing a number of continuous line contact paths. The illustration below will assist in visualization.



The actual physical construction of the contact involves several components. The wires are strung on an internal wire carrier (inner sleeve) which is subsequently capped or enclosed by a front outer ring (front sleeve) and rear ring which includes the termination configuration (terminal). All components to the assembly are completely finished with the specified electroplating prior to assembly. The wires are continuous process plated on reel before use. In this manner, interface finish requirements can be controlled very closely without the common problems of gradient, shadow, or other finish imperfections often appearing in alternative designs. Very often, this processing feature permits the specifier to reduce precious metal content with resultant savings. Joints are calculated interference fits, insuring gas tight interfaces between all elements of the HYPERBOLOID construction. An exploded view is provided next.

The unique geometry, precision processing, and careful attention to quality result in a highly desirable contact design which provides:



- VLIF (Very Low Insertion Force): Common sizes
   #22 and less average under one ounce per contact.
- Extraordinary Resistance to Shock & Vibration: Tests exceeding 300 g's without discontinuity.
- Duty Cycle Exceeding 100,000 Mate/Demate: The burnishing action of the wires on the pin surface is non-destructive. Unlike the "plow" and scrape action of common designs, HYPERBOLOID's gentle mating action enhances life.
- Low, Low Contact Resistance: The multiplicity
  of line contact, as opposed to point contact in other
  designs, provides an excellent interface exhibiting low
  contact resistance (often less than 1/2 of MIL spec.
  allowances). This characteristic also provides for a
  cooler running contact under load.
- Improved Current Carrying Capacity: The low contact resistance gives a lower °C rise from ambient under load. This feature often allows the user to operate the same size contact under higher load.
- Highest Reliability: In use for over 40 years under the most demanding conditions HYPERBOLOID has proven itself to be the leading design for integrity and reliability. On space platforms, ships and boats at sea, land vehicles, fighter and transport aircraft, missiles, torpedoes, medical and transplant electronics, industrial and environmental controls, rail, construction, ATE and test equipment, PGA sockets, test interface stations, and other applications, HYPERBOLOID has lived up to its promise of the highest reliability connector available.



#### **SPECIFICATIONS**

#### **MATERIALS:**

Pin Contacts: PhBr per ASTM B139, BeCu per ASTM B196, or Cu alloy

Socket Contacts:

Contact Wires: BeCu per ASTM B197

Termination: PhBr per ASTM B139, BeCu per ASTM B196, or Cu alloy

Support Elements: Cu alloy

**FINISHES:** 

Pin Contacts: Gold per MIL-DTL-45204 Type II, Class 1 (.000050"), Grade C over Nickel, 0.000050"

min., per SAE-AMS-QQ-N-290 over Copper per SAE AMS 2418

Socket Contacts:

Contact Wires: Gold per MIL-DTL-45204, Class 1 (.000050"), Grade C over Nickel, 0.000050"

min., per SAE-AMS-QQ-N-290 over Copper per SAE AMS 2418

Termination: Gold per MIL-DTL-45204 Type II, .000010" min. or Class 00 (.000020" min), Grade C over

Nickel, 0.000050" min., per SAE-AMS-QQ-N-290 over Copper per SAE AMS 2418 or \*\*Matte tin/lead (63-60/37/40), .00020" min., over Nickel, 0.000050" min., per SAE-AMS-QQ-N-290 over

Copper per SAE AMS 2418

Support Elements: Gold per MIL-DTL-45204, .000010" min., Grade C over Nickel, 0.000050" min., per

SAE-AMS-QQ-N-290 over Copper per SAE AMS 2418 or Nickel, 0.000050" min., per

SAE-AMS-QQ-N-290 over Copper per SAE AMS 2418

#### **PERFORMANCE:**

Contact Resistance: See Chart on page 5 - EIA-364-06 & MIL-DTL-55302 (par. 4.5.5)

Temperature: -65°C to +125°C (-86°F to +257°F)\*

Mating Force: See Chart - MIL-DTL-55302 (par. 4.5.4)

De-mating Force: See Chart - MIL-DTL-55302 (par. 4.5.4)

Solderability: (Where Applicable) IPC/EIA J-STD-002, Category 3 Humidity: IAW EIA-364-31, Method IV, except 7A & 7B (not required)

 Vibration:
 IAW EIA-364-28 & MIL-DTL-55302 (par. 4.5.10)

 Shock:
 IAW EIA-364-27 & MIL-DTL-55302 (par. 4.5.14)

 Salt Spray:
 IAW EIA-364-26 & MIL-DTL-55302 (par. 4.5.11)

 Temperature Cycling:
 IAW EIA-364-32 & MIL-DTL-55302 (par. 4.5.13)

**DIMENSIONS:** Catalog product dimensions are nominal.

Unless otherwise noted, dimensions are in inches.

\*Higher Temperature contacts available, please contact factory for more details

All information contained herein is believed to be reliable as of the date of publication, but is subject to change without notice. Current product drawings and specifications are available upon request from IEH.

IEH warrants its products to be free of defects affecting normal use. If any shipment is found to be defective we will accept return for repair or replacement at our option within one year of shipment. IEH is not responsible for incidental or consequential damages arising out of the use of our products.



#### **SPECIFICATIONS**

	CON	TACT S	SIZES*	30° C RISE <sup>2</sup>	120° C RISE <sup>2</sup>	CONTACT RESISTANCE	INSERTION FORCES (AVG.)	LIFE CYCLES
SERIES	INCH	mm	GAUGE (SAE-AS39029)	AMPS		MILLIOHMS	OUNCES	OTOLLS
1200	0.012	0.30	-	3		<10	0.4	
1600	0.016	0.40	-	3.5		<8	0.7	
1800	0.018	0.45	-	4		<8	0.75	] ,
2300	0.023	0.60	-	6.5	N/A	<5	0.8	]
2700	0.027	0.69	-	7		<5	0.9	
3000	0.030	0.76	22	8		<5	1.0	
4000	0.040	1.00	20	13		<2.5	1.0	]
5900	0.059	1.50	-	15	32	<2.5	2.5	
6200	0.062	1.57	16	15.5	29	<2.5	2.5	
7800	0.078	2.00	14	18.5	37	<1.5	2.5	
9300	0.093	2.36	12	27	40	<1	9	>100,000
9800	0.098	2.50	-	26.8	52	<1	12	100,000
1180	0.118	3.00	-	38	68	<1	18	
1250	0.125	3.18	10	41	76	<0.75	18	
1380	0.138	3.50	-	44	83	<0.5	18	
1420	0.142	3.61	8	57	116	<0.5	19	
1575	0.157	4.00	-	60	114	<0.5	20	
1690	0.169	4.30	-	100	152	<0.4	30	]
2541	0.241	6.12	-	N/A	230	<0.25	120	]
3150	0.315	8.00	-	108	214	<0.18	121	] '
3570	0.357	9.07	0	132	260	<0.25	122	]
5000	0.500	12.7	-	180	360	<0.09	130	

<sup>\*</sup> Contact size equivalent to mating pin diameter

#### **NOTES:**

- 1. Sizes and styles are the most common and do not include all contacts currently in production. Custom Designs available upon request.
- 2. Ampacity values are based on discrete contact testing, and are for reference only. Variables which can affect ampacity ratings include but are not limited to; number of hyperboloid wires inside sockets, wire diameter, AWG of the terminating cable, and derating requirements of end-user applications. IEH test data and methodology are available upon request.
- 3. Hyperboloid interconnects are unequaled for service under severe shock and vibration. They exhibit no intermittence through test levels exceeding 300 G's continuous.

All information contained herein is believed to be reliable as of the date of publication, but is subject to change without notice. Current product drawings and specifications are available upon request from IEH.

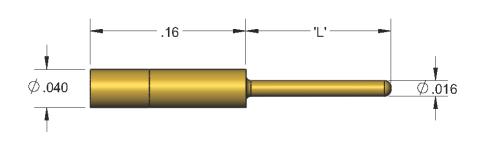
IEH warrants its products to be free of defects affecting normal use. If any shipment is found to be defective we will accept return for repair or replacement at our option within one year of shipment. IEH is not responsible for incidental or consequential damages arising out of the use of our products.



## 1200 SERIES SOCKET- ACCEPTS Ø0.30 mm (0.012) MATING PIN

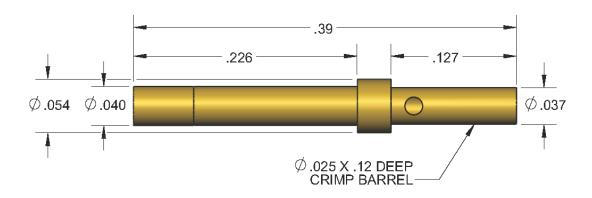
#### **DIP SOLDER**

PART NO.	<b>'L'</b>
HSD1200-1	1.065
HSD1200-2	0.958
HSD1200-3	0.774
HSD1200-4	0.682
HSD1200-5	0.496
HSD1200-6	0.404



#### **CRIMP**

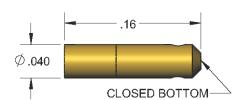
HSC1200-1



Accepts 26-28 AWG Wire

#### **PWB**

HSR1200-1

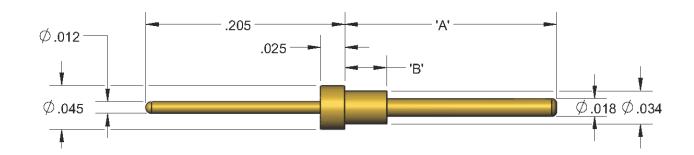




# 1200 SERIES PIN - Ø0.30 mm (0.012)

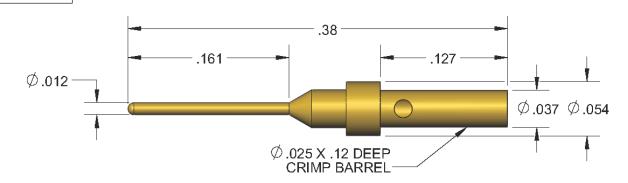
#### **DIP SOLDER**

PART NO.	<b>'A'</b>	<b>'B'</b>
TPD1200	.218	.043
TPD1201	.650	.028



#### **CRIMP**

### TPC1200



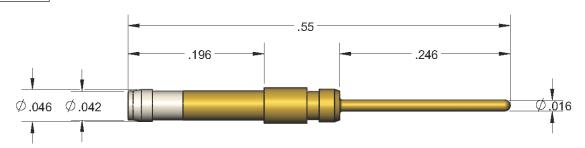
Accepts 26-28 AWG Wire



### 1600 SERIES SOCKET- ACCEPTS Ø0.40 mm (0.016) MATING PIN

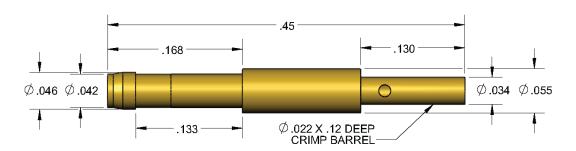
#### **DIP SOLDER**

HSD1600-1



#### **CRIMP**

HSC1600-1

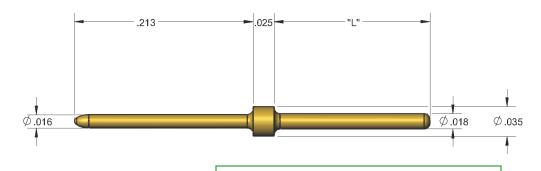


Accepts 26-28 AWG Wire

### 1600 SERIES PIN- Ø0.40mm (0.016)

#### **DIP SOLDER**

PART NO.	"L"
TPD1600A	0.160
TPD1600B	0.191
TPD1600C	0.223
TPD1600D	0.285

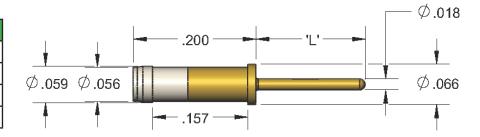




### 1800 SERIES SOCKET - ACCEPTS Ø0.45 mm (0.018) MATING PIN

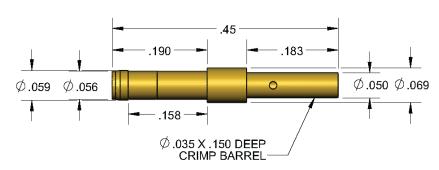
#### **DIP SOLDER**

PART NO.	·L'
HSD1800-1	.180
HSD1800-5	.135
HSD1800-6A	.175
HSD1800-13	.166



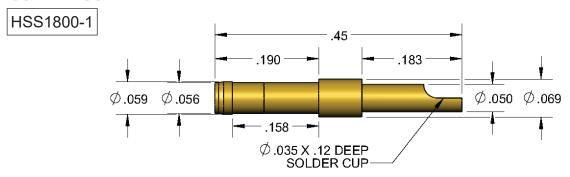
#### **CRIMP**

HSC1800-1



Accepts 22-26 AWG Wire

#### **SOLDER CUP**

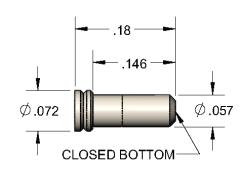


Accepts Up To 22 AWG Wire

#### **PWB**

HSR1800-1

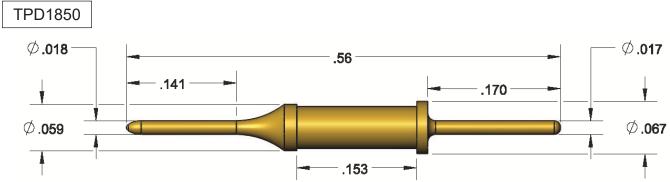
Note: Tin-Lead Plated





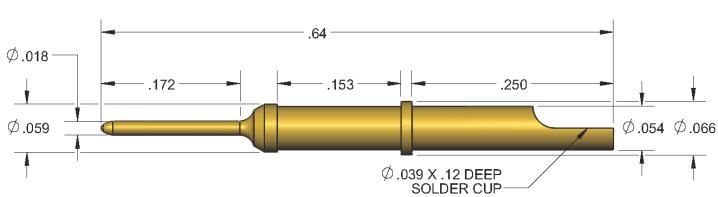
## 1800 SERIES PIN - Ø0.45 mm (0.018)

## DIP SOLDER



#### **SOLDER CUP**

TPS1800



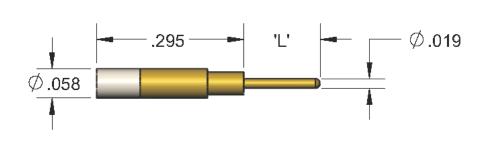
Accepts Up To 22 AWG Wire



### 2300 SERIES SOCKET- ACCEPTS Ø0.60 mm (0.023) MATING PIN

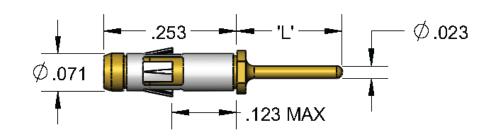
#### **DIP SOLDER**

PART NO.	·L'
HSD2301-35	.156
HSD2301-45	.129
HSD2301-51	.113
HSD2301-52	.185
HSD2301-63	.229
HSD2301-64	.429
HSD2301-82	.292



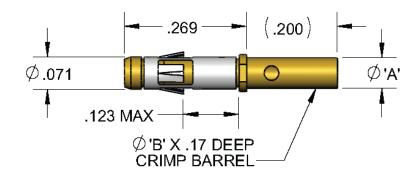
#### **DIP SOLDER**

PART NO.	·L'
HSD2306-5	.222
HSD2306-6	.260



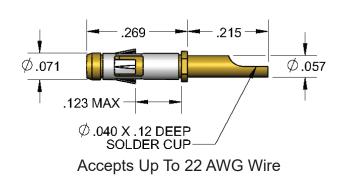
#### **CRIMP**

PART NO.	'A'	<b>'B'</b>	AWG
			Wire
HSC2306-1	.072	.058	20
HSC2306-1A	.067	.048	20
HSC2306-1B	.051	.035	22-26



#### **SOLDER CUP**

HSS2306-1

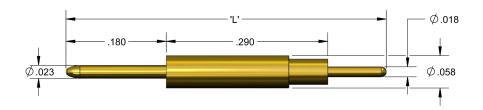




# 2300 SERIES PIN - Ø0.60 mm (0.023)

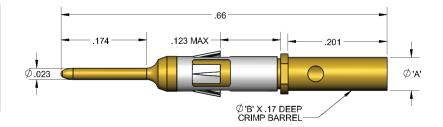
#### **DIP SOLDER**

PART NO.	L'
TPD2328	.66
TPD2328A	.63
TPD2328B	.58
TPD2328C	.595



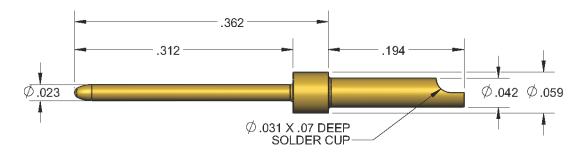
#### **CRIMP**

PART NO.	<b>'A'</b>	<b>'B'</b>	AWG
			WIRE
TPC2307	.072	.058	20
TPC2308	.067	.048	20
TPC2309	.051	.031	22-26



#### **SOLDER CUP**

### **TPS2306**



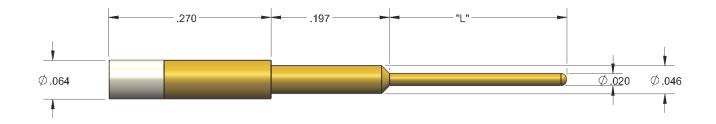
Accepts Up To 22 AWG Wire



# 2700 SERIES SOCKET- ACCEPTS Ø0.69 mm (0.027) MATING PIN

#### **DIP SOLDER**

PART NO.	"L"
HSD2700-4	0.295
HSD2700-5	0.420

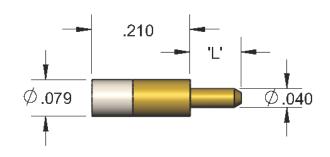




## 3000 SERIES SOCKET- ACCEPTS Ø0.030 (0.76 mm) MATING PIN

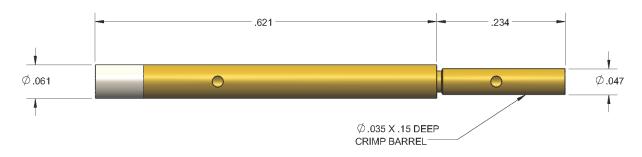
#### **DIP SOLDER**

PART NO.	"L"
HSD3002-1	.110
HSD3002-2	.140
HSD3002-3	.160
HSD3002-7	.200



#### **CRIMP**

HSC3003-348 (PER SAE-AS39029/56-348)



Accepts 22-28 AWG Wire

#### **CRIMP**

HSC3003-354 (PER SAE-AS39029/57-354)



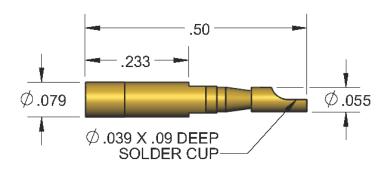
Accepts 22-28 AWG Wire



## 3000 SERIES SOCKET- ACCEPTS Ø0.030 (0.76 mm) MATING PIN

#### **SOLDER CUP**

HSS3030-2

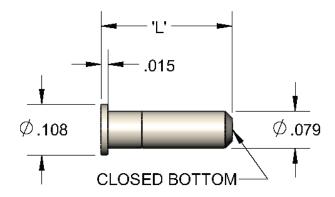


Accepts up to 22 AWG Wire

**PWB** 

PART NO.	·L'
HSR3000-1	.28
HSR3000-2	.21

Note: Tin-Lead Plated

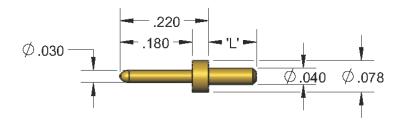




# 3000 SERIES PIN - Ø0.030 (0.76 mm)

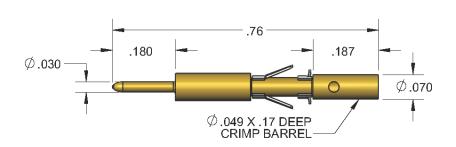
#### **DIP SOLDER**

PART NO.	$\mathbf{L}$
TPD3050	.110
TPD3052	.165
TPD3053	.130



#### **CRIMP**

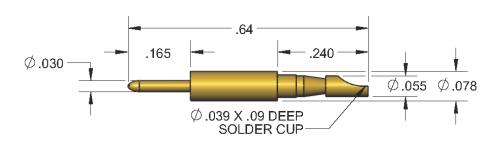
TPC3000



Accepts 22-26 AWG Wire

#### **SOLDER CUP**

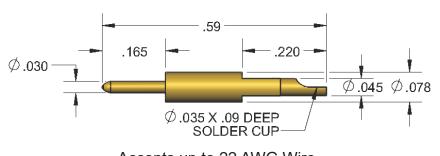
TPS3033



Accepts up to 22 AWG Wire

#### **SOLDER CUP**

TPS3040



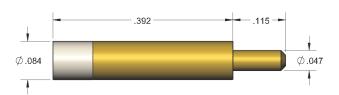
Accepts up to 22 AWG Wire



## 4000 SERIES SOCKET- ACCEPTS Ø0.040 (1 mm) MATING PIN

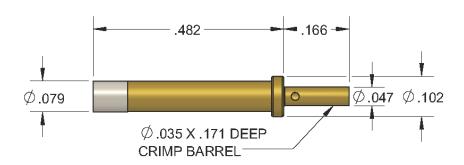
#### **DIP SOLDER**

HSD4030-2



#### **CRIMP**

HSC4003-115M



Accepts 24-26 AWG Wire

#### **CRIMP**

HSC4003-351 (PER SAE-AS39029/56-351)



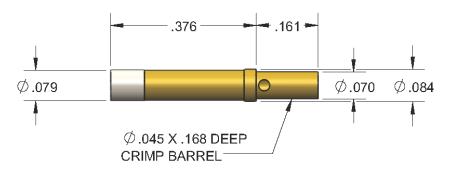
Accepts 20-24 AWG Wire



## 4000 SERIES SOCKET- ACCEPTS Ø0.040 (1 mm) MATING PIN

#### **CRIMP**

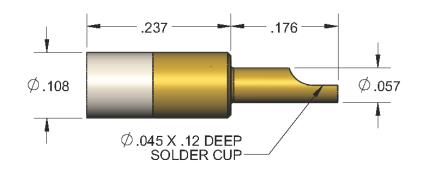
HSC4003-368 (PER SAE-AS39029/63-368)



Accepts 20-24 AWG Wire

#### **SOLDER CUP**

HSS4000-5

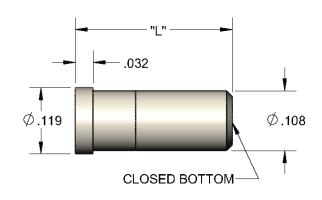


Accepts up to 22 AWG Wire

#### **PWB**

PART NO.	"L"
HSR4000-1	.285
HSR4000-3	.358

Note: Tin-Lead Plated

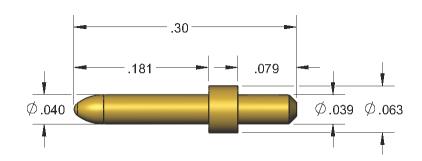




### 4000 SERIES PIN - Ø0.040 (1 mm)

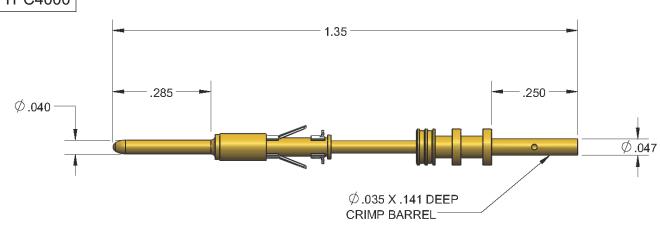
#### **DIP SOLDER**

TPD4021



#### **CRIMP**

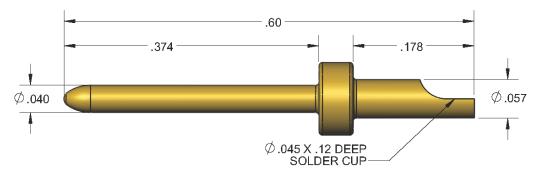
TPC4000



Accepts 22-28 AWG Wire

#### **SOLDER CUP**

TPS4010



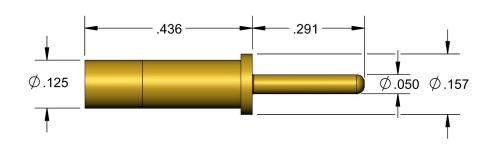
Accepts up to 20 AWG Wire



## 5900 SERIES SOCKET- ACCEPTS Ø1.50 mm (0.059) MATING PIN

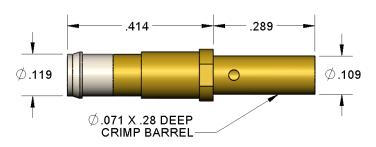
#### **DIP SOLDER**

HSD5901-1



#### **CRIMP**

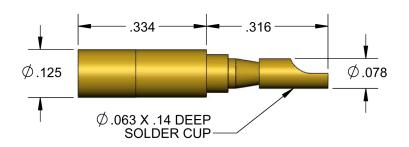
HSC5900-1



Accepts 14-20 AWG Wire

#### **SOLDER CUP**

HSS5900-1

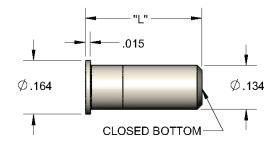


Accepts up to 16 AWG Wire

#### **PWB**

PART NO.	"L"
HSR5900-1	.28
HSR5900-2	.36

Note: Tin-Lead Plated

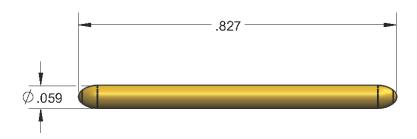




# 5900 SERIES PIN - Ø1.50 mm (0.059)

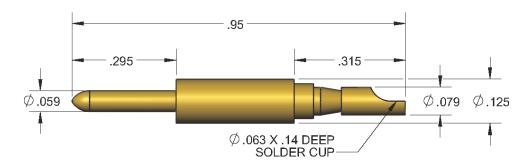
#### **DIP SOLDER**

TPD5911



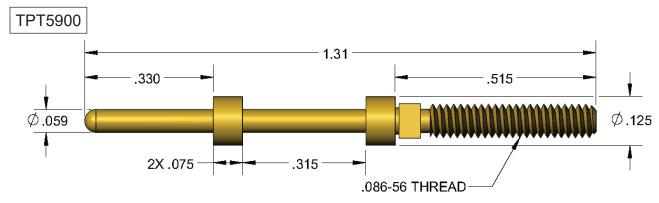
#### **SOLDER CUP**

TPS5900



Accepts up to 16 AWG Wire

#### **THREADED**

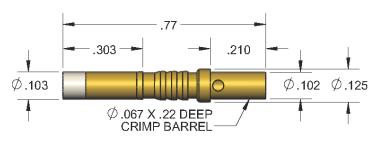




## 6200 SERIES SOCKET- ACCEPTS Ø0.062 (1.57 mm) MATING PIN

#### **CRIMP**

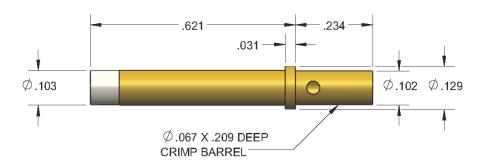
HSC6200-3



Accepts 16-20 AWG Wire

#### **CRIMP**

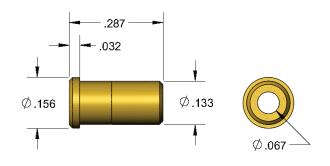
HSC6203-352 (PER SAE-AS39029/56-352)



Accepts 16-20 AWG Wire

#### **PWB**

HST6220-1

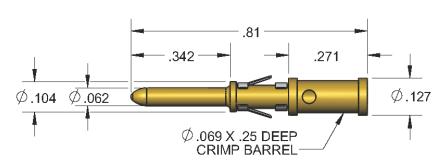




# 6200 SERIES PIN - Ø0.062 (1.57 mm)

#### **CRIMP**

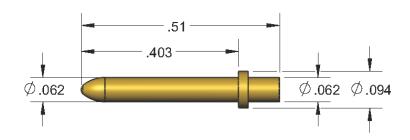
TPC6200



Accepts 16-20 AWG Wire

#### **BUTT SOLDER**

TPT6200

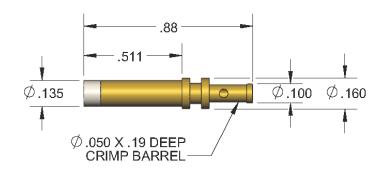




## 7800 SERIES SOCKET- ACCEPTS Ø2.00 mm (0.078) MATING PIN

#### **CRIMP**

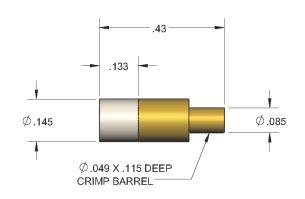
HSC7800-1



Accepts 20 AWG Wire

#### **CRIMP**

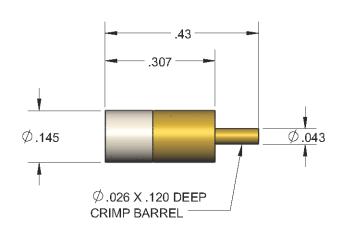
HSC7800-2



Accepts 20 AWG Wire

#### **CRIMP**

HSC7800-3



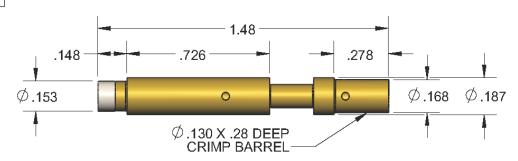
Accepts 26-28 AWG Wire



## 9300 SERIES SOCKET- ACCEPTS Ø0.093 (2.36 mm) MATING PIN

#### **CRIMP**

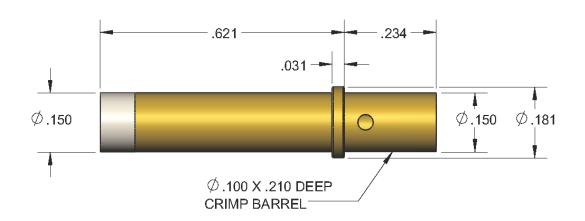
HSC9300-2



Accepts 9-11 AWG Wire

#### **CRIMP**

HSC9300-353 (PER SAE-AS39029/56-353)



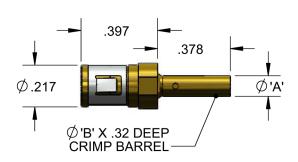
Accepts 12-14 AWG Wire



### 9800 SERIES SOCKET- ACCEPTS Ø2.50 mm (0.098) MATING PIN

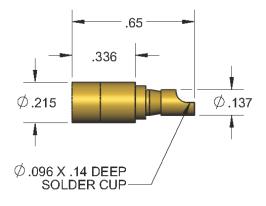
#### **CRIMP**

PART NO.	<b>'A'</b>	<b>'B'</b>	AWG Wire
HSC9800-1	.107	.077	14-20
HSC9800-2	.122	.059	18-22



#### **SOLDER CUP**

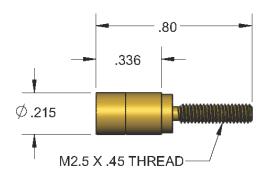
HSS9800-3



Accepts up to 12 AWG Wire

#### **THREADED**

HST9800-2

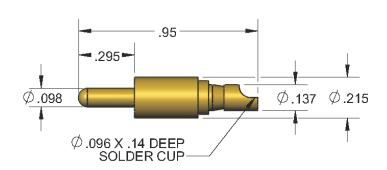




## 9800 SERIES PIN - Ø2.50 mm (0.098)

#### **SOLDER CUP**

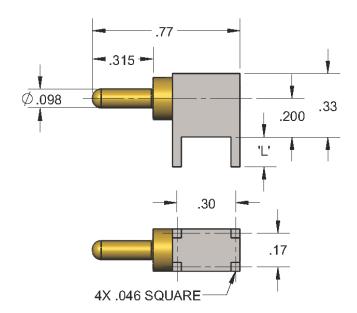
TPS9801



Accepts up to 12 AWG Wire

#### **RIGHT ANGLE PWB**

PART NO.	·L'	
TPE0980-1	.155	
TPE0980-2	.100	

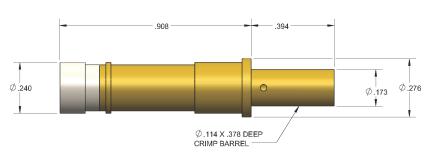




### 1180 SERIES SOCKET - ACCEPTS Ø3.00 mm (0.118) MATING PIN

#### **CRIMP**

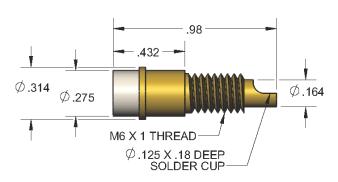
HSC1180-1



Accepts 12-14 AWG Wire

#### **SOLDER CUP**

HSS1180-3

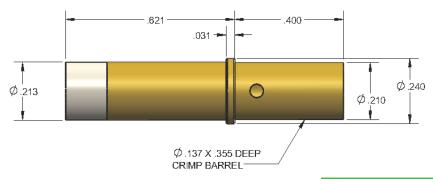


Accepts up to 12 AWG Wire

### 1250 SERIES SOCKET - ACCEPTS Ø0.125 (3.18 mm) MATING PIN

#### **CRIMP**

HSC1250-527 (PER SAE-AS39029/56-527)



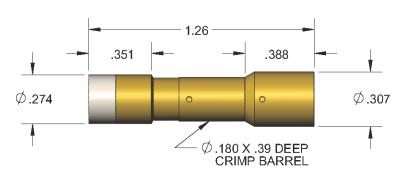
Accepts 10 AWG Wire



# 1380 SERIES SOCKET- ACCEPTS Ø3.50 mm (0.138) MATING PIN

#### **CRIMP**

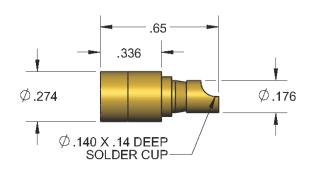
HSC1380-2



Accepts 8-10 AWG Wire

#### **SOLDER CUP**

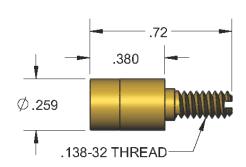
HSS1380-1D



Accepts up to 10 AWG Wire

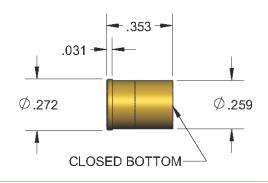
#### **THREADED**

HST1380-2A



#### **PWB**

HSR1380-1

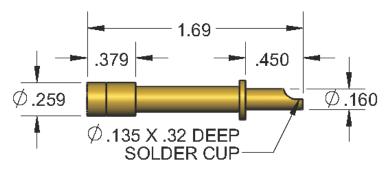




## 1380 SERIES SOCKET- ACCEPTS Ø3.50 mm (0.138) MATING PIN

#### **SOLDER CUP**

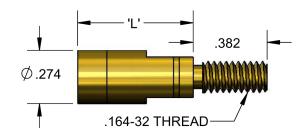
HSS1380-7



Accepts up to 10 AWG Wire

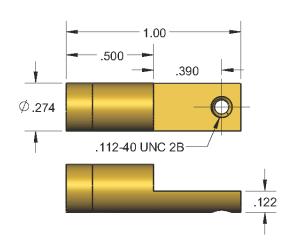
#### **THREADED**

PART NO.	·L'
HST1385-1	.60
HST1385-2	.95



#### **LUG MOUNT**

HST1386-1

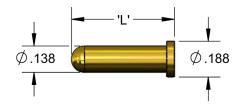




## 1380 SERIES PIN - Ø3.50 mm (0.138)

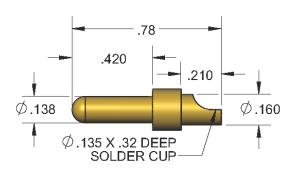
#### **BUTT SOLDER**

PART NO.	L'
TPD1381	.54
TPD1382	.84



#### **SOLDER CUP**

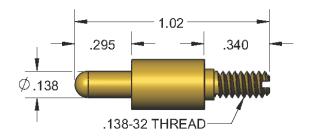
TPS1381



Accepts up to 10 AWG Wire

#### **THREADED**

TPT1380

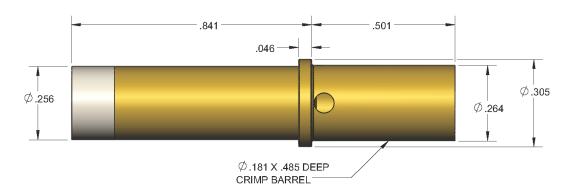




### 1420 SERIES SOCKET- ACCEPTS Ø3.60mm (0.142) MATING PIN

#### **CRIMP**

HSC1420-220 (PER SAE-AS39029/30-220)

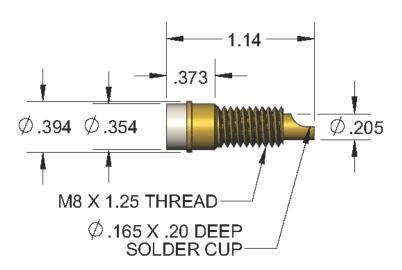


Accepts 8-10 AWG Wire

# 1575 SERIES SOCKET- ACCEPTS Ø4.00mm (0.157) MATING PIN

#### **SOLDER CUP**

HSS1575-1



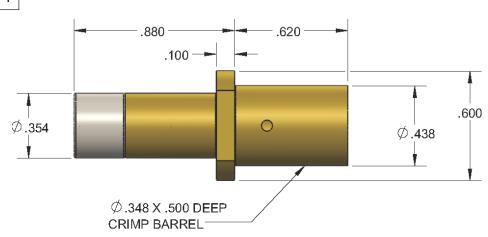
Accepts up to 8 AWG Wire



### 1690 SERIES SOCKET- ACCEPTS Ø4.30mm (0.169) MATING PIN

#### **CRIMP**

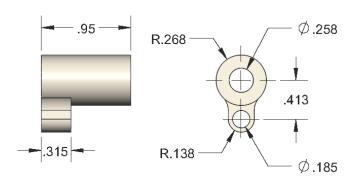
HSC1690-1



Accepts 2 AWG Wire

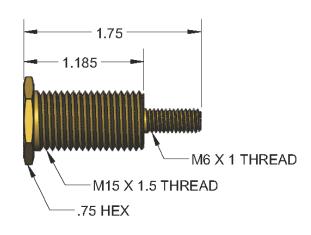
#### **PASS THRU**

HSS1690-1



#### **THREADED**

HST1690-1

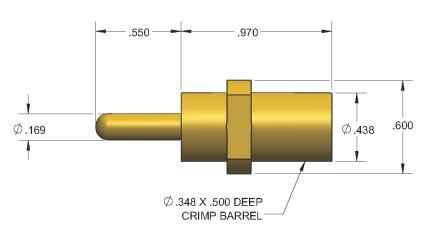




## 1690 SERIES PIN - Ø4.30mm (0.169)

#### **CRIMP**

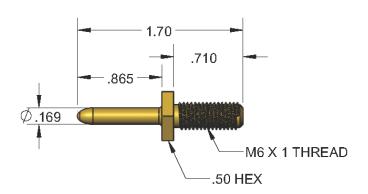
TPC1690



Accepts 2 AWG Wire

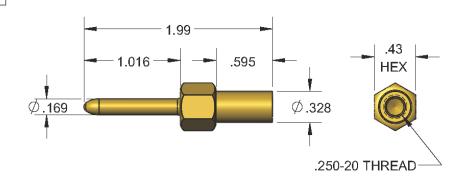
#### **THREADED**

TPT1691



#### **THREADED**

TPT1693

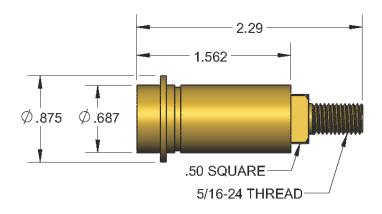




## 2541 SERIES SOCKET- ACCEPTS Ø6.12mm (0.241) MATING PIN

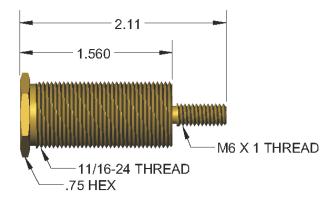
#### **THREADED**

HST2541-1



#### **THREADED**

HST2541-3

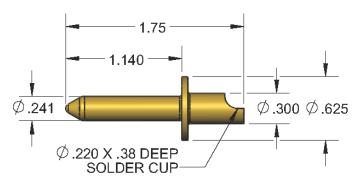




## 2541 SERIES PIN - Ø6.12mm (0.241)

#### **SOLDER CUP**

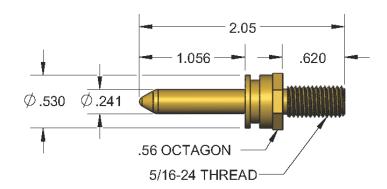
TPS2541



Accepts up to 5 AWG Wire

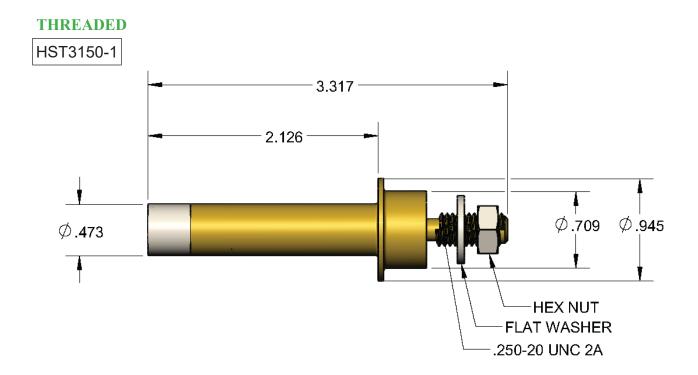
#### **THREADED**

TPT2541





### 3150 SERIES SOCKET- ACCEPTS Ø8.0mm (0.315) MATING PIN

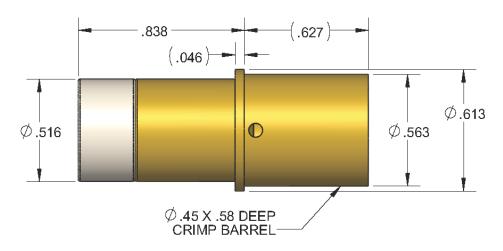




# 3570 SERIES SOCKET- ACCEPTS Ø0.357 (9.07mm) MATING PIN

#### **CRIMP**

HSC3570-1 (M39029/30-222)



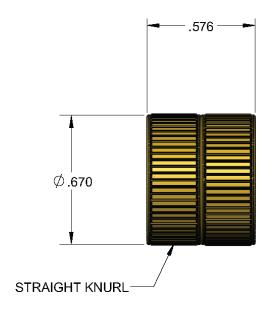
Accepts 1/0 AWG Wire



## 5000 SERIES SOCKET- ACCEPTS Ø0.500 (12.7mm) MATING PIN

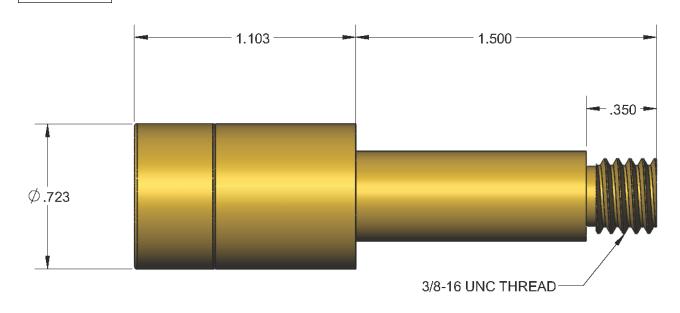
#### **PASS THRU**





#### **THREADED**

### HST5000-1





# **Crimp Tool, Positioner, Insertion Tool & Removal Tool**

HSC1200-1	Part Number	Crimp Tool	Positioner	Insertion Tool	Removal Tool
HSC1800-1	HSC1200-1		T1914	T1916	N/A*
HSC1600-1   M225007-01   H314   H315   N/A*   N/A*   N/A*   HSC2306-1   AFM8   K13-1   N/A*   T1978   HSC2306-1A   AFM8   K13-1   N/A*   T1978   HSC2306-1A   AFM8   K13-1   N/A*   T1978   HSC2306-1B   M252007-01   M252007-01   AFM8   K13-1   N/A*   N/A*   N/A*   N/A*   T1978   M252007-01   AFM8   K13-1   N/A*   N/	TPC1200		T1914	T1916	N/A*
HSC2306-1	HSC1600-1		T1914	T1916	N/A*
HSC2306-1A	HSC1800-1	AFM8	SS1.0045	N/A*	N/A*
HSC2306-1B   M22520/2-01	HSC2306-1	AFM8	K13-1	N/A*	T1978
HSC2306-1B	HSC2306-1A	AFM8	K13-1	N/A*	T1978
TPC2308	HSC2306-1B	M22520/2-01	K547	S/MONT 1.0060	N/A*
TPC2309	TPC2307	AFM8	K13-1	N/A*	N/A*
TPC2309  AFM8  M2252012-01  M2252017-05  M81969/14-01  M81969/14-02  M81969/14-01  M81969/14-02  M81969/14-03  M81969/14-03  M81969/14-01  M81969/14-02  M81969/14-02  M81969/14-03  M81	TPC2308	AFM8	K13-1	N/A*	N/A*
HSC3003-348   M22520/7-01   M22520/7-05   M81969/8-01   M81969/8-02	TPC2309	M22520/2-01	K547	S/MONT 1.0060	N/A*
M81969/8-02   M81969/8-01   M81969/8-02   M81969/8-01   M81969/8-02   M81969/8-01   M81969/8-02   M81969/8-01   M81969/8-02   M81969/8-01   M81969/8-02   M81969/8-01   M81969/8-02   M81969/8-05	HSC3003-348				1
HSC4003-115M   M22520/2-01   M22520/7-05   M81969/14-01   M81969/8-02	HSC3003-354				
HSC4003-351   M22520/7-01   M22520/7-05   M81969/8-01   M81969/8-02	TPC3000	N/A*	N/A*	N/A*	N/A*
HSC4003-351         M22520/7-01 M22520/1-01         M22520/2-10 M22520/1-04         M81969/14-02 M81969/8-05         M81969/14-02 M81969/8-05           HSC4003-368         M22520/2-01 M22520/2-01         M22520/2-08         M81969/14-02         M81969/14-02           TPC4000         M22520/2-01 M22520/7-01         M22520/2-07 M22520/7-05         M81969/14-01 M81969/8-01         M81969/14-02           HSC5900-1         AF8         TP687         N/A*         S/DEM5.0150           HSC6200-3         AF8         T1165         N/A*         T1124           HSC6203-352         M22520/2-01 M22520/7-01         M22520/1-04 M22520/7-04         M81969/14-03 M81969/8-07         M81969/14-03 M81969/8-08           TPC6200         N/A*         N/A*         N/A*         N/A*           HSC7800-1         N/A*         N/A*         N/A*         N/A*           HSC7800-2         N/A*         N/A*         N/A*         N/A*           HSC9300-3         N/A*         N/A*         N/A*         N/A*           HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-09           HSC1180-1         N/A*	HSC4003-115M				
TPC4000 M22520/2-01 M22520/7-05 M81969/14-01 M81969/14-01 M81969/8-02  HSC5900-1 AF8 TP687 N/A* S/DEM5.0150  HSC6200-3 AF8 T1165 N/A* T1124  HSC6203-352 M22520/2-01 M22520/1-04 M81969/14-03 M81969/14-03 M81969/8-08  TPC6200 N/A* N/A* N/A* N/A* N/A*  HSC7800-1 N/A* N/A* N/A* N/A* N/A*  HSC7800-2 N/A* N/A* N/A* N/A* N/A*  HSC9300-2 N/A* N/A* N/A* N/A* N/A*  HSC9300-2 N/A* N/A* N/A* N/A* N/A*  HSC9300-3 M22520/2-01 M22520/1-04 M81969/14-03 M81969/14-03 M81969/14-03 M81969/14-03 M81969/14-03 M81969/14-03 M81969/14-04 M81969/14-05 M12520/15-05 N/A* N/A* N/A* N/A* N/A* N/A* N/A*  HSC1180-1 N/A* N/A* N/A* N/A* N/A* N/A* N/A*  HSC1250-527 N/A* N/A* N/A* N/A* N/A* N/A* N/A*  HSC1380-2 N/A* N/A* N/A* N/A* N/A* N/A* N/A*  HSC1380-2 N/A* N/A* N/A* N/A* N/A* N/A* N/A*  HSC1420-220 M22520/2-01 N/A* N/A* N/A* N/A* N/A* N/A*	HSC4003-351	M22520/7-01	M22520/2-10		l
HPC4000	HSC4003-368	M22520/201	M22520/2-08	M81969/14-02	M81969/1-02
HSC6200-3  AF8  T1165  N/A*  T1124  HSC6203-352  M22520/2-01  M22520/7-04  M81969/14-03  M81969/8-07  M81969/8-08  M81969/8-09  M81969/8-09  M81969/8-09  M81969/8-10  HSC9800-1  N/A*  N/A*  N/A*  N/A*  N/A*  MS1969/14-04  M81969/8-09  M81969/8-10  HSC1180-1  N/A*	TPC4000				1
HSC6203-352         M22520/2-01 M22520/7-04         M22520/1-04 M81969/14-03 M81969/8-07         M81969/14-03 M81969/8-08           TPC6200         N/A*         N/A*         N/A*         N/A*           HSC7800-1         N/A*         N/A*         N/A*         N/A*           HSC7800-2         N/A*         N/A*         N/A*         N/A*           HSC7800-3         N/A*         N/A*         N/A*         N/A*           HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*	HSC5900-1	AF8	TP687	N/A*	S/DEM5.0150
HSC6203-352         M22520/7-01         M22520/7-04         M81969/8-07         M81969/8-08           TPC6200         N/A*         N/A*         N/A*         N/A*           HSC7800-1         N/A*         N/A*         N/A*         N/A*           HSC7800-2         N/A*         N/A*         N/A*         N/A*           HSC7800-3         N/A*         N/A*         N/A*         N/A*           HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-09         M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         N/A*         N/A*           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*	HSC6200-3	AF8	T1165	N/A*	T1124
HSC7800-1         N/A*         N/A*         N/A*         N/A*           HSC7800-2         N/A*         N/A*         N/A*         N/A*           HSC7800-3         N/A*         N/A*         N/A*         N/A*           HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*         M81969/29-02	HSC6203-352				
HSC7800-2         N/A*         N/A*         N/A*         N/A*           HSC7800-3         N/A*         N/A*         N/A*         N/A*           HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*	TPC6200	N/A*	N/A*	N/A*	N/A*
HSC7800-3         N/A*         N/A*         N/A*         N/A*           HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-09           HSC9800-1         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*         M81969/29-02	HSC7800-1	N/A*	N/A*	N/A*	N/A*
HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*         M81969/29-02	HSC7800-2	N/A*	N/A*	N/A*	N/A*
HSC9300-2         N/A*         N/A*         N/A*         N/A*           HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*         M81969/29-02	HSC7800-3	N/A*	N/A*	N/A*	N/A*
HSC9300-353         M22520/2-01         M22520/1-04         M81969/14-04 M81969/8-09         M81969/14-04 M81969/8-10           HSC9800-1         N/A*         N/A*         N/A*         N/A*           HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*         M81969/29-02					
HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*	HSC9300-353	M22520/2-01	M22520/1-04		
HSC1180-1         N/A*         N/A*         N/A*         N/A*           HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*	HSC9800-1	N/A*	N/A*	N/A*	N/A*
HSC1250-527         N/A*         N/A*         M81969/14-05         M81969/14-05           HSC1380-2         N/A*         N/A*         N/A*         N/A*           HSC1420-220         M22520/23-01         N/A*         N/A*         N/A*         M81969/29-02					
HSC1380-2 N/A* N/A* N/A* N/A* HSC1420-220 M22520/23-01 N/A* N/A* N/A* M81969/29-02					· · · · · · · · · · · · · · · · · · ·
HSC1420-220 M22520/23-01 N/A* N/A* M81969/29-02					
1977					
TPC1690 N/A* N/A* N/A* N/A*					
HSC3570-1 M22520/23-01 N/A* N/A* M81969/29-04					

<sup>\*</sup>Custom Tooling; Contact factory for further assistance.

IEH Quality Statement
Listening to our customers and meeting their needs while continuously improving our processes and services







# **IEH CORPORATION**

140 58TH STREET, 8E, BROOKLYN, NY 11220 PHONE (718) 492-4448 • FAX (718) 492-9898

www.iehcorp.com • ieh@iehcorp.com