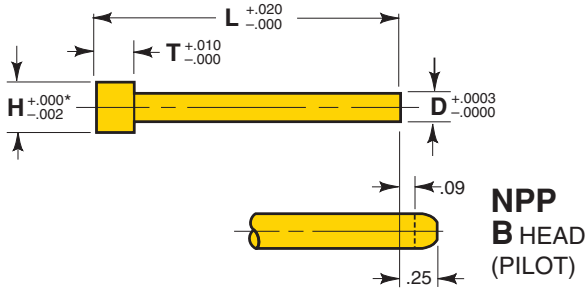


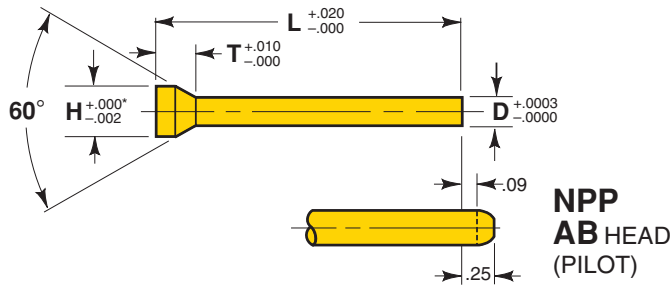
PORTER HP & NPP Type Perforators

.001 increment shank diameters ZeroTemp (Deep Cryogenic) Treated

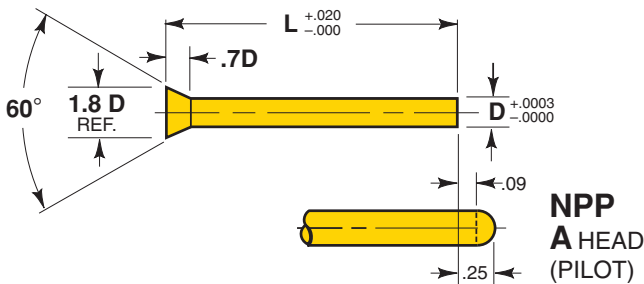
HP PIN B HEAD



HP PIN AB HEAD



HP PIN A HEAD



Ordering Example:

Qty.	Style	Size	L	D	Head Style
12	HP	10	x 2.50	x .175	AB
12	NPP	10	x 2.50	x .175	AB

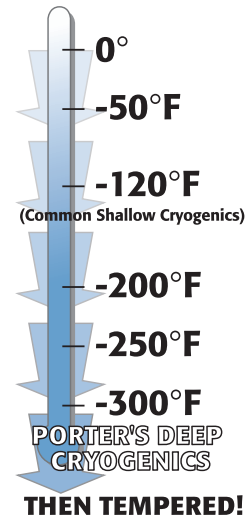
**M2 Rc 60-63
Heads Drawn Rc 40-55
ZeroTemp Treated**

* H Diameter $\pm_{.010}^{.000}$ Sizes # 26 thru # 37

- All perfs are head drawn for additional toughness.
- Pilot tip is not included in the "L" length of "NPP" & "NAP" pilots.
- Perforators (up to # 24) are ZeroTemp treated (See page 42) giving you the toughest M2 steel perforator for your money.
- Porter angle style heads (A & AB) can greatly reduce head popping due to elimination of relatively sharp corners present in 90° angle heads.
- Vertical lapped perforators are available; call out "VL" in description.
- Nitrogenic Treatment and Titanium Nitride coatings are available for increased wear resistance, see page 42.

** 40° angled tip pilot also available, call out "NAP"

Catalog Code	Size No.	L in .25" Increments	D .001 Increments	T	H
HP Straight Pin	1/0	1.25 – 1.50	.025 – .0290	.093	.060
	1	1.25 – 2.00	.030 – .0400	.093	.070
	2	1.50 – 2.50	.041 – .0550	.093	.085
	3	1.50 – 2.50	.056 – .0700	.093	.100
	4	1.50 – 2.50	.071 – .0850	.093	.115
	5	1.50 – 2.75	.086 – .1000	.093	.130
	6	1.50 – 2.75	.101 – .1150	.093	.145
	7	1.50 – 2.75	.116 – .1300	.093	.160
NPP Radius Pilot Tip	8	1.50 – 2.75	.131 – .1450	.093	.175
	9	1.50 – 2.75	.146 – .1600	.093	.190
	10	1.50 – 3.00	.161 – .1750	.125	.205
	11	1.50 – 3.00	.176 – .1900	.125	.220
	12	1.50 – 3.00	.191 – .2050	.125	.235
	13	1.50 – 3.00	.206 – .2200	.125	.250
	14	1.50 – 3.00	.221 – .2350	.125	.265
	15	1.50 – 3.00	.236 – .2500	.125	.280
NAP Angled Pilot Tip **	16	1.75 – 3.50	.251 – .2650	.125	.295
	17	1.75 – 3.50	.266 – .2800	.125	.310
	18	1.75 – 3.50	.281 – .2950	.125	.325
	19	1.75 – 3.50	.296 – .3100	.125	.340
	20	1.75 – 3.50	.311 – .3250	.187	.355
	21	2.00 – 4.00	.326 – .3400	.187	.370
	22	2.00 – 4.00	.341 – .3550	.187	.385
	23	2.00 – 4.00	.356 – .3700	.187	.400
	24	2.00 – 4.00	.371 – .3850	.187	.415
	Size #26 and larger "B" style head*				
	26	2.25 – 4.00	.376 – .4375	.187	.563
	27	2.25 – 4.00	.438 – .5000	.187	.625
	28	2.25 – 4.00	.501 – .5620	.187	.687
	29	2.25 – 4.00	.563 – .6250	.187	.750
	30	2.25 – 4.50	.626 – .7190	.250	.844
	31	2.25 – 4.50	.720 – .8120	.250	.937
	32	2.25 – 5.00	.813 – .9060	.250	1.031
	33	2.25 – 5.00	.907 – 1.0000	.250	1.125
	34	2.25 – 5.50	1.001 – 1.1250	.250	1.250
	35	2.25 – 5.50	1.126 – 1.2500	.250	1.375
	36	2.25 – 5.50	1.251 – 1.4380	.250	1.563
	37	2.25 – 5.50	1.439 – 1.6250	.250	1.750



- All Porter Perforators up to #24 are "Deep Cryogenically" treated for
1. Wear
 2. Toughness
 3. Dimensional Stability
- See page 42 for more details.