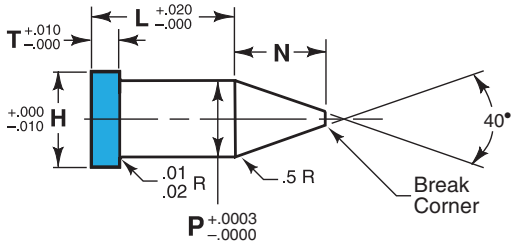
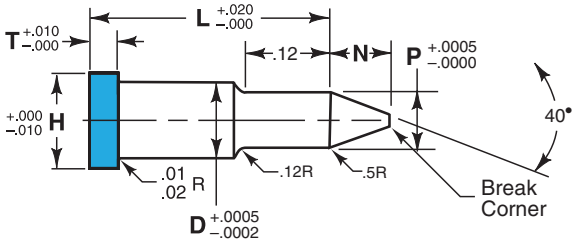
PORTER Sur-Align Pilots

Sur–Align Straight (SAPQ)



Sur-Align Pilots prevent movement. Reduce standard pilot deflection by mounting Sur-Align in your guide stripper plate.

Sur–Align Nibbled (SAPN)



Ordering Example:

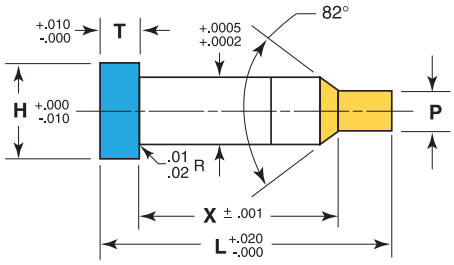
Qty	Steel	Type	D Code	L	P Dim.	Alt.
10	A2	SAPQ		0.87	0.270	RL.725
20	M2	SAPN	75	1.37	0.630	

Steel: A2, M2 Rc 60-63
⌾ .0005 P to D

Type	Range P	Max N	Head T	Head H	Lengths L 0.625	0.750	0.875	1.000	1.125	1.250	1.375	Shank Type	Shank D	Shank Code	Min P	Range P	Max N
SAPQ	.1865-.2500	.25	.125	.375	●	●	●	●	●	●	●	SAPN 25	.2500	25	.092	.1650-.2499	.25
SAPQ	.2501-.3125	.31	.125	.438	●	●	●	●	●	●	●	SAPN 31	.3125	31	.092	.2100-.3124	.31
SAPQ	.3126-.3750	.37	.188	.500	●	●	●	●	●	●	●	SAPN 37	.3750	37	.092	.2550-.3749	.37
SAPQ	.3751-.4375	.43	.188	.562	●	●	●	●	●	●	●	SAPN 43	.4375	43	.092	.3000-.4374	.43
SAPQ	.4376-.5000	.50	.188	.625	●	●	●	●	●	●	●	SAPN 50	.5000	50	.124	.3450-.4999	.50
SAPQ	.5001-.6250	.62	.250	.750	●	●	●	●	●	●	●	SAPN 62	.6250	62	.234	.4400-.6249	.62
SAPQ	.6251-.7500	.75	.250	.875		●	●	●	●	●	●	SAPN 75	.7500	75	.299	.5300-.7499	.75
SAPQ	.7501-.8750	.87	.250	1.000		●	●	●	●	●	●	SAPN 87	.8750	87	.349	.6200-.8749	.87
SAPQ	.8751-1.000	1.00	.250	1.125		●	●	●	●	●	●	SAPN 100	1.0000	100	.399	.7100-.9999	1.00

Any overall length within catalog range no extra cost Specify"RL" plus length.

PORTER Standard Precision Headed (SCS)



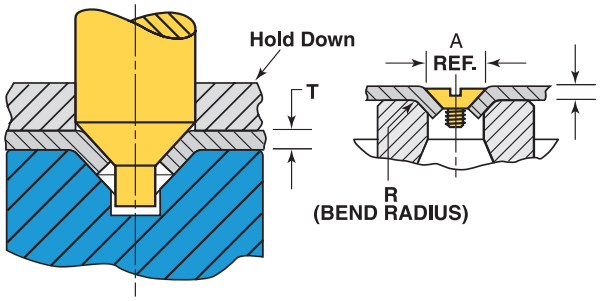
Steel: A2, M2 Rc 60-63
Heads Drawn Rc 40-55
P +.0005 -.0000 ⌾ .001 P to D

Catalog Number	ØD	L in .25" Increments	P +.0005 –.0000 Range	X	H	T
SCS–25	.2500	1.50–2.50	.050 –.125	Specify in .001 Increments.	.37	.125
SCS–31	.3125	1.50–2.75	.076 –.140		.43	.125
SCS–37	.3750	1.75–3.00	.090 –.187		.50	.187
SCS–50	.5000	2.00–3.50	.140 –.250		.62	.187
SCS–62	.6250	2.00–3.50	.200 –.281		.75	.250
SCS–75	.7500	2.25–4.00	.264 –.359		.87	.250
SCS–100	1.0000	2.50–4.00	.374 –.500		1.12	.250

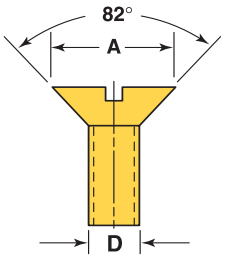
Ordering Example:

Qty	Steel	Cat No.	x	L	x	P	x =
6 ea.	M2	SCS 50	x	3.0	x	.250	x = 2.625

Countersink Punches



"C" = Co/Sink to theoretical sharp corner
"T" = Material Thickness
"A" = Screw Head Diameter
FORMULA TO CALCULATE "C"
.9T + A = C*
*This will result in an approximate flush screw mount.



Nominal Screw Size	A Max.	D
0	.138	.060
1	.168	.073
2	.197	.086
3	.226	.099
4	.255	.112
5	.281	.125
6	.307	.138
8	.359	.164
10	.411	.190
12	.463	.216
.25	.531	.250
.3125	.656	.312
.375	.781	.375

To produce best results with countersink punches, we recommend this method. As an additional feature, the stripper plate may be made of urethane or of a steel plate faced with urethane. As the urethane is compressed, it will flow along the angle of the countersink punch keeping the perforated and formed material flat and distortion free.

Standard Alterations are changes that are beyond the ranges listed in the catalog that can be altered for a minimal charge. See page 37.