

HPS—High Performance Studs

Higher Torque—Balanced Design—Exceeds MFG Requirements



- Manufactured to Industry Standards or Machine Builders Spec.
- Grind Finish and blended radius's for Ultimate Strength
- Pilot on thread side for added strength
- Pilot O-ring Seal on Coolant Knobs
- Thread length extended
- Manufactured From 4320 and heat treated to provide over 160,000 psi Tensile Strength, Yield

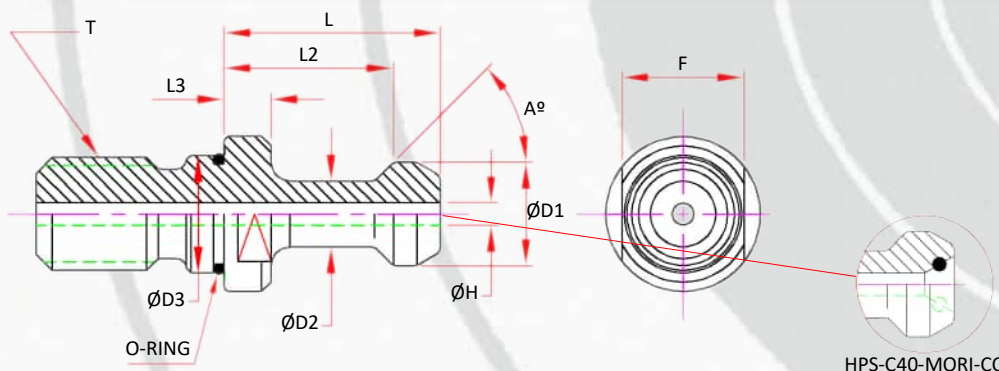
PIONEER Piloted Retention Studs

All piloted knobs extend the length of the threads over previous ANSI standards allowing for reduced expansion of the small end of the holder taper.

O-rings added to coolant knobs to meet many machine company requirements.



*Visit our web site for
a full offering our
High Performance Pull Studs.
www.PIONEERNA.com*



CAT40

Part Number	A Angle	D1 Head	D2 Neck	D3 Pilot	L Proj.	L2 Pull Loc.	L3 Flange	H Hole	Pilot	O-Ring on Pilot	F Flats	T Thread	Socket Wrench	Notes
HPS-C40-MAS-45	45	0.591	0.394	0.641	1.266	0.990	0.236	-	Yes	-				MAS P40T-1
HPS-C40-MAS-45-C	45	0.591	0.394	0.641	1.266	0.990	0.236	0.157	Yes	Yes†				MAS P40T-1 Coolant
HPS-C40-MAS-60	60	0.591	0.394	0.630	1.268	0.992	0.236	-	Yes	-				MAS P40T-2
HPS-C40-MAS-60-C	60	0.591	0.394	0.641	1.268	0.992	0.236	0.157	Yes	Yes†				MAS P40T-2 Coolant
HPS-C40-JIS-C	75	0.748	0.551	0.641	1.024	0.787	0.276	0.236	Yes	Yes†	19mm		TWS-M19	JIS B6339
HPS-C40-MATSUURA-C	75	0.748	0.551	0.641	1.024	0.787	0.157	0.236	Yes	Yes†				Matsura w/4mm Flange JIS B6339
HPS-C40-DIN-C	75	0.748	0.551	0.641	1.024	0.787	0.157	0.276	Yes	Yes†				DIN 69872
HPS-C40-MAKINO-C	75	0.748	0.551	0.641	1.029	0.793	0.276	0.276	Yes	Yes†				Makino Design
HPS-C40-MORI-CO	75	0.748	0.551	0.641	1.029	0.793	0.236	0.276	Yes	Yes†				Mori O-Ring OD & ID
HPS-C40-ANSI-C	45	0.740	0.490	0.641	0.640	0.440	0.118	0.291	Yes	Yes†				ANSI B5.50
HPS-C40-OKUMA-C	45	0.740	0.490	0.641	0.640	0.440	0.118	0.157	Yes	Yes†	0.750		TWS-075	Okuma Coolant Thru
HPS-C40-ANSI	45	0.740	0.490	0.641	0.640	0.440	0.118	-	Yes	-				Okuma Non Coolant
HPS-C40-MAS-90	90	0.591	0.394	-	1.260	0.984	0.236	-	Yes	-				MAS P40T-3 Mori-Seiki Design
HPS-C40-MAS-90-C	90	0.591	0.394	0.641	1.260	0.984	0.236	0.157	Yes	Yes†	17mm		TWS-M17	MAS P40T-3 Mori-Seiki Coolant

† O-Ring added to Pilot, adheres to machine company changes, remove O-Ring if not required



Pioneer North America

641 Fargo Ave, Elk Grove Village, IL 60007

847-593-6000 | SALES@PIONEERNA.com | www.PIONEERNA.com