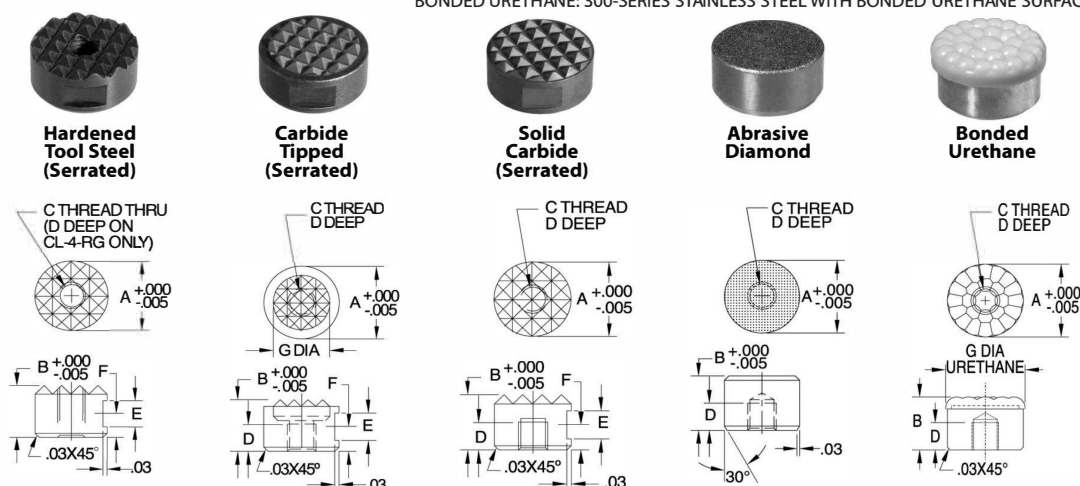


ROUND GRIPPERS

HARDENED TOOL STEEL: M-2 TOOL STEEL, HEAT TREATED RC 60-62, BLACK OXIDE FINISH
CARBIDE TIPPED: ALLOY STEEL, HEAT TREATED, WITH BRAZED CARBIDE INSERT, BLACK OXIDE FINISH
SOLID CARBIDE: CARBIDE WITH STEEL THREAD INSERT
ABRASIVE DIAMOND: 17-4PH STAINLESS STEEL, HEAT TREATED RC 43-46, WITH FUSED ABRASIVE DIAMOND SURFACE
BONDED URETHANE: 300-SERIES STAINLESS STEEL WITH BONDED URETHANE SURFACE



Round Grippers are replaceable inserts that provide additional holding force and/or wear resistance when installed in a fixture. Fasten from behind with a socket-head cap screw, or clamp with a setscrew on the O.D. locking flat (where provided). Grippers can be recess-mounted in a flat-bottom hole, or surface mounted to use as a rest pad. Round Grippers can also be installed in Gripper Swivel Pads and Gripper Swivel Contact Bolts.

Serrated grippers are designed to slightly penetrate the workpiece to significantly increase gripping force, rather than relying on static friction alone. The hardened-tool-steel version is the most economical and impact resistant. The carbide-tipped version is still economical and impact resistant while providing extra durability. The solid-carbide version is the most durable.

Abrasive-diamond grippers have an abrasive-diamond surface permanently fused to a hardened stainless steel pad. This abrasive surface, comparable to a 100-grit abrasive, provides significant holding force with relatively low clamping pressure and minimal surface marring. This diamond-particle surface also offers excellent wear resistance.

Bonded-urethane grippers have a urethane surface permanently bonded to a stainless steel pad. This non-marking, non-staining urethane provides excellent protection against damage to finished workpieces. The bubbled texture of the urethane surface offers firm gripping, yet allows air to escape so that no suction is created under load. Urethane also provides excellent wear resistance, and is available in three firmnesses to suit a wide variety of applications.

INCH

PART NO. HARDENED TOOL STEEL (SERRATED)	PART NO. CARBIDE TIPPED (SERRATED)	PART NO. SOLID CARBIDE (SERRATED)	PART NO. ABRASIVE DIAMOND	A DIA	B	C	D	E	F	G DIA	SERRATIONS	PART NO. BONDED URETHANE	B	D	G DIA
CL-4-RG	—	—	—	1/4	—	#8-32	—	—	—	—	Extra Fine	CL-6-RGU-1*	—	—	—
CL-6-RG	CL-6-RGT	—	CL-6-RGD	3/8	—	#10-32	—	—	—	5/16	Fine	CL-8-RGU-1*	—	—	.39
CL-8-RG	CL-8-RGT	CL-8-RGC	CL-8-RGD	1/2	3/8	—	3/16	11/64	—	3/8	—	CL-10-RGU-1*	1/2	1/4	.51
CL-10-RG	CL-10-RGT	CL-10-RGC	CL-10-RGD	5/8	—	—	—	—	—	1/2	—	CL-12-RGU-1*	—	—	.63
CL-12-RG	CL-12-RGT	CL-12-RGC	CL-12-RGD	3/4	—	1/4-28	—	—	—	5/8	Fine	CL-16-RGU-1*	—	3/8	.83
CL-16-RG	CL-16-RGT	—	CL-16-RGD	1	—	—	—	—	—	3/4	—	—	—	—	1.06

METRIC

PART NO.	A DIA (mm)	B (mm)	C THREAD	THREAD PITCH (mm)	D (mm)	E (mm)	F (mm)	SERRATIONS	SERRATION DIMENSIONS (mm)
CLM-10-RG	10	10	M5	.8	5	4.7	4.5	EXTRA FINE	2.4x90°
CLM-12-RG	12	10	M5	.8	5	4.7	4.5	FINE	3.2x90°
CLM-16-RG	16	10	M6	1	5	4.7	4.5	FINE	3.2x90°
CLM-20-RG	20	10	M6	1	5	4.7	4.5	FINE	3.2x90°
CLM-25-RG	25	10	M6	1	5	4.7	4.5	FINE	3.2x90°

ROUND GRIPPERS

CARBIDE TIPPED: ALLOY STEEL, HEAT TREATED, WITH BRAZED CARBIDE INSERT, BLACK OXIDE FINISH

HARDENED STEEL: 8620 STEEL, CASE HARDENED, BLACK OXIDE FINISH

HARDENED STAINLESS STEEL: 17-4 STAINLESS STEEL, HEAT TREATED RC 43-46

DELIRIN®: WHITE DELIRIN® 500



Carbide Tipped (Flat)



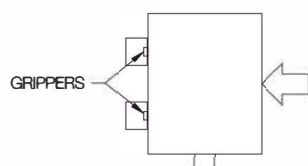
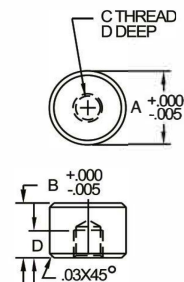
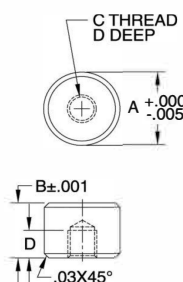
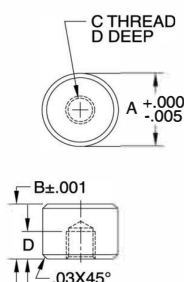
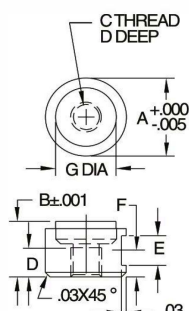
Hardened Steel (Flat)



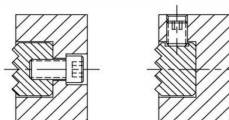
Hardened Stainless Steel (Flat)



Delrin® (Flat)



Serrated grippers recessed into a fixture's locating surfaces dramatically increase resistance to movement by embedding themselves in the workpiece.



Flat grippers can be used to provide additional wear resistance, or as precision rest pads. The carbide-tipped version is the most durable. The hardened-steel version is the most economical and impact resistant. The hardened-stainless-steel version provides high strength and excellent corrosion resistance. The Delrin® version helps avoid marring finished workpieces.

INCH

PART NO. CARBIDE TIPPED (FLAT)	PART NO. HARDENED STEEL (FLAT)	PART NO. HARDENED STAINLESS (FLAT)	PART NO. DELIRIN® (FLAT)	A DIA	B	C	D	E	F	G DIA
CL-6-RGFT	CL-6-RGF	CL-6-RGF-S	CL-6-RGFN	3/8	3/8	#10-32	3/16	3/16	11/64	5/16
CL-8-RGFT	CL-8-RGF	CL-8-RGF-S	CL-8-RGFN	1/2						3/8
CL-10-RGFT	CL-10-RGF	CL-10-RGF-S	CL-10-RGFN	5/8						1/2
CL-12-RGFT	CL-12-RGF	CL-12-RGF-S	CL-12-RGFN	3/4		1/4-28				5/8
CL-16-RGFT	CL-16-RGF	CL-16-RGF-S	CL-16-RGFN	1						3/4

METRIC

PART NO.	A DIA (mm)	B (mm)	C THREAD	THREAD PITCH (mm)	D (mm)
CLM-10-RGF	10	10	M5	.8	5
CLM-12-RGF	12	10	M5	.8	5
CLM-16-RGF	16	10	M6	1	5
CLM-20-RGF	20	10	M6	1	5
CLM-25-RGF	25	10	M6	1	5

Round Grippers can be fastened from behind with a Socket-Head Cap Screw. Some gripper types also have an O.D. locking flat for fastening with a set screw.

ROUND GRIPPERS (COUNTERBORED)

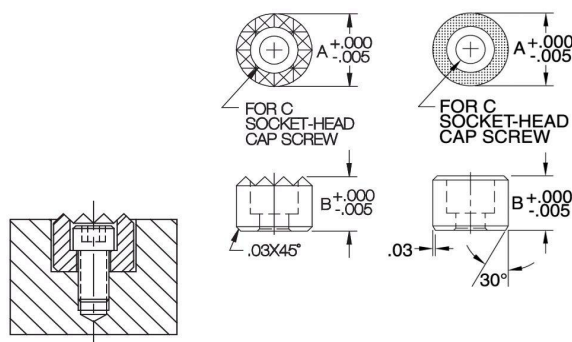
HARDENED TOOL STEEL: M-2 TOOL STEEL, HEAT TREATED RC 60-62, BLACK OXIDE FINISH
ABRASIVE DIAMOND: 17-4 STAINLESS STEEL, HEAT TREATED RC 43-46, WITH ABRASIVE DIAMOND SURFACE



**Hardened Tool Steel
(Serrated)**



Abrasive Diamond



Counterbored Round Grippers are ideal for blind-hole installation and surface mounting. Fasten with a standard socket-head cap screw. The serrated version, made of hardened tool steel, is designed to slightly penetrate the workpiece to significantly increase gripping force. The abrasive-diamond version has an abrasive-diamond surface permanently fused to a hardened stainless steel pad. This abrasive surface, comparable to a 100-grit abrasive, provides significant holding force with relatively low clamping pressure and minimal surface marring. This diamond-particle surface also offers excellent wear resistance.

INCH

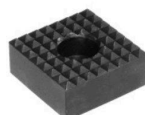
PART NO. HARDENED TOOL STEEL (SERRATED)	PART NO. DIAMOND ABRASIVE	A DIA	B	C	SERRATIONS (HARDENED TOOL STEEL VERSION)	
CL-8-RGB	CL-8-RGBD	1/2	3/8	#8	Fine	.125x90°
CL-10-RGB	CL-10-RGBD	5/8				
CL-12-RGB	CL-12-RGBD	3/4	1/2	#10		
CL-16-RGB	CL-16-RGBD	1		1/4		

METRIC

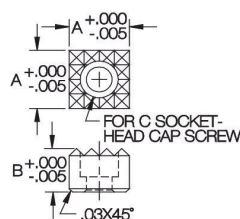
CLM-12-RGB	CLM-12-RGBD	12mm	10mm	M4	Fine	3.2x90°
CLM-16-RGB	CLM-16-RGBD	16mm				
CLM-20-RGB	CLM-20-RGBD	20mm	12mm	M5		
CLM-25-RGB	CLM-25-RGBD	25mm		M6		

SQUARE GRIPPERS (COUNTERBORED)

M-2 TOOL STEEL, HEAT TREATED RC 60-62, BLACK OXIDE FINISH



**Hardened Tool Steel
(Serrated)**



Counterbored Square Grippers are ideal for blind-hole installation and surface mounting. Fasten with a standard socket-head cap screw.

COUNTERBORED (INCH)

COUNTERBORED (INCH)					
PART NO. HARDENED TOOL STEEL (SERRATED)					
	A	B	C	SERRATIONS	
	CL-8-SGB	1/2	#10	Fine	.125x90°
	CL-12-SGB	3/4	1/4		
CL-16-SGB	1				

COUNTERBORED (METRIC)

CLM-12-SGB	12mm	12mm	M4	Fine	3.2x90°
CLM-20-SGB	20mm		M5		
CLM-25-SGB	25mm		M6		