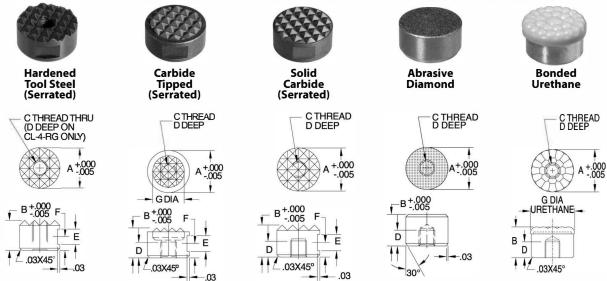
ROUND GRIPPERS

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 solidcarbide 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.														UR	ETHAN	IE
HARDENED TOOL STEEL (SERRATED)	PART NO. CARBIDE TIPPED (SERRATED)	PART NO. SOLID CARBIDE (SERRATED)	PART NO. ABRASIVE DIAMOND	A DIA	В	c	D	E	F	G DIA	SERR	ATIONS	PART NO. BONDED URETHANE	В	D	G DIA
CL-4-RG	_	_	_	1/4		#8-32	_	=	_	_	Extra		_	_	_	_
CL-6-RG	CL-6-RGT	_	CL-6-RGD	3/8		#10-32				5/16	Fine	.094x90°	CL-6-RGU-1*		1/4	.39
CL-8-RG	CL-8-RGT	CL-8-RGC	CL-8-RGD	1/2	3/8	#10-32				3/8			CL-8-RGU-1*		1/4	.51
CL-10-RG	CL-10-RGT	CL-10-RGC	CL-10-RGD	5/8	3/8		3/16	3/16	11/64	1/2	Fine	.125x90°	CL-10-RGU-1*	1/2		.63
CL-12-RG	CL-12-RGT	CL-12-RGC	CL-12-RGD	3/4		1/4-28				5/8	rine	.123890	CL-12-RGU-1*		3/8	.83
CL-16-RG	CL-16-RGT	_	CL-16-RGD	1						3/4			CL-16-RGU-1*			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 **DELRIN®: WHITE DELRIN® 500**



Carbide Tipped (Flat)



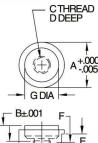
Hardened Steel (Flat)



Hardened **Stainless Steel** (Flat)



Delrin® (Flat)



.03X45°



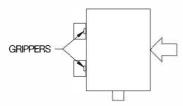




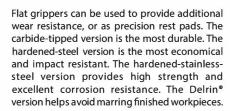








Serrated grippers recessed into a fixture's locating surfaces dramatically increase resistance to movement by embedding themselves in the workpiece. **INCH**







PART NO. CARBIDE TIPPED (FLAT)	PART NO. HARDENED STEEL (FLAT)	PART NO. HARDENED STAINLESS (FLAT)	PART NO. DELRIN° (FLAT)	A DIA	В	С	D	E	F	G DIA
CL-6-RGFT	CL-6-RGF	CL-6-RGF-S	CL-6-RGFN	3/8		#10.33	3/16	3/16	11/64	5/16
CL-8-RGFT	CL-8-RGF	CL-8-RGF-S	CL-8-RGFN	1/2		#10-32				3/8
CL-10-RGFT	CL-10-RGF	CL-10-RGF-S	CL-10-RGFN	5/8	3/8					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

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.

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 (COUNTERBORED)

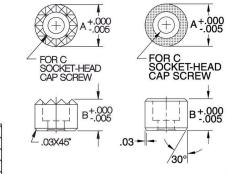
HARDENED TOOL STEEL: M-2 TOOL STEEL, HEAT TREATED RC 60-62, BLACK OXIDE FINISH ABRASIVE DIAMOND: 17-4 STAINLESS STEEL, HEAT TREATED RC 43-46, WITH ABRASIVE DIAMOND SURFACE

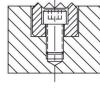


Hardened Tool Steel (Serrated)



Abrasive Diamond





Counterbored Round Grippers are ideal for blindhole 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	В	С	(HAR	ATIONS DENED . STEEL SION)
CL-8-RGB	CL-8-RGBD	1/2	3/8	2.0		
CL-10-RGB	CL-10-RGBD	5/8	3/8	#8	Fine	.125x90°
CL-12-RGB	CL-12-RGBD	3/4	1/2	#10	rine	.125X90
CL-16-RGB	CL-16-RGBD	1	1/2	1/4		

METRIC

CLM-12-RGB	CLM-12-RGBD	12mm	10	M4		
CLM-16-RGB	CLM-16-RGBD	16mm	10mm	1714	F:	2.200°
CLM-20-RGB	CLM-20-RGBD	20mm	12	M5	Fine	3.2x90°
CLM-25-RGB	CLM-25-RGBD	25mm	12mm	M6		

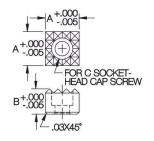
SQUARE GRIPPERS (COUNTERBORED)

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)

PART NO. HARDENED TOOL STEEL (SERRATED)	A	В	с	SERRATIONS		
CL-8-SGB	1/2		#10			
CL-12-SGB	3/4	1/2	1/2		.125x90°	
CL-16-SGB	1		1/4			

COUNTERBORED (METRIC)

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