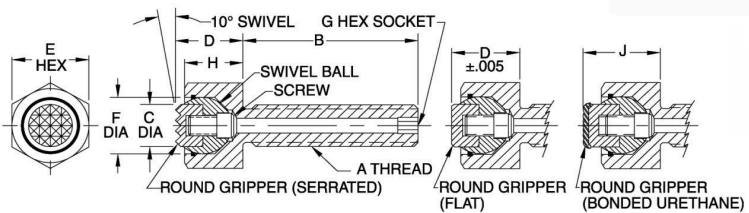


GRIPPER SWIVEL CONTACT BOLTS

BODY AND GRIPPER SCREW: STEEL, CASE HARDENED, BLACK OXIDE FINISH
SWIVEL BALL: 440C STAINLESS STEEL, HEAT TREATED. O-RING: RUBBER



Threaded contact bolt with a built-in swivel ball to hold a Round Gripper. This swivel ball, held by a retaining ring, is removable to allow installing any of the eleven different gripper types (order gripper separately). A fastening screw is furnished with the contact bolt. This screw serves as a positive stop to prevent the ball from swiveling too far. Can be used as a contact bolt, or as a support. Available in thread sizes from 3/8-16 to 1"-8 (M10 to M24 in metric), most in a choice of several lengths.



BODY AND GRIPPER — ORDER SEPARATELY (INCH)

PART NO. BODY WITHOUT GRIPPER	PART NO. — ROUND GRIPPER						A	B	C DIA	D	E	F DIA	G	H	J	SERRATIONS	
	HARDENED TOOL STEEL (SERRATED)	CARBIDE TIPPED (SERRATED)	SOLID CARBIDE (SERRATED)	ABRASIVE DIAMOND	BONDED URETHANE	CARBIDE TIPPED (FLAT)											
CL-605-GSP	CL-6-RG	CL-6-RGT	—	CL-6-RGD	CL-6-RGU-1	CL-6-RGFT	3/8-16	1/2	3/8	5/8	5/8	1/2	1/8	1/2	3/4	Extra Fine	.094x90°
CL-610-GSP					CL-6-RGU-2			1									
CL-615-GSP					CL-6-RGU-3			1-1/2									
CL-810-GSP	CL-8-RG	CL-8-RGT	CL-8-RGC	CL-8-RGD	CL-8-RGU-1	CL-8-RGFT	1/2-13	1	1/2	3/4	13/16	5/8	3/16	5/8	7/8		
CL-815-GSP					CL-8-RGU-2			1-1/2									
CL-1010-GSP					CL-8-RGU-3			CL-8-RGFN									
CL-1010-GSP	CL-10-RG	CL-10-RGT	CL-10-RGC	CL-10-RGD	CL-10-RGU-1	CL-10-RGFT	5/8-11	1	5/8	13/16	15/16	3/4	1/4	11/16	15/16		
CL-1020-GSP					CL-10-RGU-2			2									
CL-1020-GSP					CL-10-RGU-3			CL-10-RGFN									
CL-1210-GSP	CL-12-RG	CL-12-RGT	CL-12-RGC	CL-12-RGD	CL-12-RGU-1	CL-12-RGFT	3/4-10	1	3/4	7/8	1-1/8	7/8	5/16	3/4	1		
CL-1225-GSP					CL-12-RGU-2			2-1/2									
CL-1225-GSP					CL-12-RGU-3			CL-12-RGFN									
CL-1620-GSP	CL-16-RG	CL-16-RGT	—	CL-16-RGD	CL-16-RGU-1	CL-16-RGFT	1"-8	2	1	1-1/8	1-1/2	1-1/8	3/8	1	1-1/4		
					CL-16-RGU-2												
					CL-16-RGU-3												

BODY AND GRIPPER — ORDER SEPARATELY (METRIC)

CLM-10-GSP	CLM-10-RG	CLM-10-RGT	—	CLM-10-RGD	CLM-10-RGU-1	—	CLM-10-RGF	10mm	.67	.866	M6	.29	.512	.71	.95	—	
					CLM-10-RGU-2	—	CLM-10-RGF-S										
					CLM-10-RGU-3	—	CLM-10-RGFN										
CLM-12-GSP	CLM-12-RG	CLM-12-RGT	—	CLM-12-RGD	CLM-12-RGU-1	—	CLM-12-RGF	10mm	.75	.945	M8	.33	.591	.79	1.02	—	
					CLM-12-RGU-2	—	CLM-12-RGF-S										
					CLM-12-RGU-3	—	CLM-12-RGFN										
CLM-16-GSP	CLM-16-RG	CLM-16-RGT	—	CLM-16-RGD	CLM-16-RGU-1	—	CLM-16-RGF	12mm	.94	1.102	M10	.35	.787	.95	1.18	—	
					CLM-16-RGU-2	—	CLM-16-RGF-S										
					CLM-16-RGU-3	—	CLM-16-RGFN										
CLM-20-GSP	CLM-20-RG	CLM-20-RGT	—	CLM-20-RGD	CLM-20-RGU-1	—	CLM-20-RGF	16mm	1.18	1.181	M12	.33	.906	1.02	1.26	—	
					CLM-20-RGU-2	—	CLM-20-RGF-S										
					CLM-20-RGU-3	—	CLM-20-RGFN										
CLM-25-GSP	CLM-25-RG	CLM-25-RGT	—	CLM-25-RGD	CLM-25-RGU-1	—	CLM-25-RGF	20mm	1.42	1.42	M12	.47	1.102	1.26	1.50	—	
					CLM-25-RGU-2	—	CLM-25-RGF-S										
					CLM-25-RGU-3	—	CLM-25-RGFN										

GRIPPER SWIVEL CONTACT BOLTS

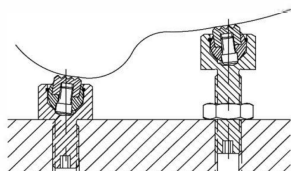
BODY: STEEL, CASE HARDENED, BLACK OXIDE FINISH

O-RING: RUBBER

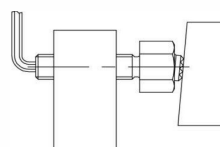
SERRATED SWIVEL BALL: HIGH-SPEED TOOL STEEL, BLACK OXIDE FINISH

FLAT SWIVEL BALL: STEEL, HARDENED, BLACK OXIDE FINISH

FLAT DELRIN® SWIVEL BALL: WHITE DELRIN® 500



Gripper Swivel Contact Bolts are ideal as either fixed or adjustable supports under workpieces with curved or sloped surfaces.



Gripper Swivel Contact Bolts can also be used as screw clamps by turning them with a hex wrench (large sizes only).



**Hardened
Tool Steel
(Serrated)**



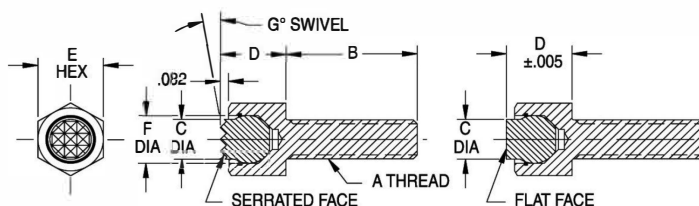
**Hardened
Steel
(Flat)**



**Delrin®
(Flat)**

Mini Sizes

Mini threaded contact bolt with a built-in swivel ball held by a retaining ring. Choose from the three gripper types shown, serrated or flat. The gripper face is machined directly on the swivel ball. A positive stop prevents the ball from swiveling too far. Can be used as a contact bolt, or as a support. Available in thread sizes from #10-32 to 5/16-18 (M6 to M8 in metric), most in a choice of several lengths.



MINI — COMPLETE ASSEMBLY (INCH)

PART NO. — COMPLETE			A	B	C DIA	D	E	F DIA	G	SERRATIONS	
HARDENED TOOL STEEL (SERRATED)	HARDENED STEEL (FLAT)	DELRIN* (FLAT)									
CL-305-GSB	CL-305-GBF	CL-305-GBFN	#10-32	1/2	5/32	5/16	3/8	3/16	14°	Super Fine	.062x90°
CL-405-GSB	CL-405-GBF	CL-405-GBFN	1/4-20	1/2	1/4	3/8	7/16	9/32			
CL-410-GSB	CL-410-GBF	CL-410-GBFN		1							
CL-415-GSB	CL-415-GBF	CL-415-GBFN		1-1/2							
CL-505-GSB	CL-505-GBF	CL-505-GBFN	5/16-18	1/2	5/16	7/16	1/2	3/8		Extra Fine	.094x90°
CL-510-GSB	CL-510-GBF	CL-510-GBFN		1							
CL-515-GSB	CL-515-GBF	CL-515-GBFN		1-1/2							

MINI — COMPLETE ASSEMBLY (METRIC)

PART NO.	A THREAD	THREAD PITCH (mm)	B (mm)	C DIA (mm)	D (mm)	E (mm)	F DIA (mm)	G	SERRATIONS	SERRATION DIMENSIONS (mm)
CLM-612-GSB	M6	1	12	6	9.5	10	7	14°	SUPER FINE	1.6x90°
CLM-625-GSB	M6	1	25	6	9.5	10	7	14°	SUPER FINE	1.6x90°
CLM-640-GSB	M6	1	40	6	9.5	10	7	14°	SUPER FINE	1.6x90°
CLM-812-GSB	M8	1.25	12	8.5	13	13	10	12°	EXTRA FINE	2.4x90°
CLM-825-GSB	M8	1.25	25	8.5	13	13	10	12°	EXTRA FINE	2.4x90°
CLM-840-GSB	M8	1.25	40	8.5	13	13	10	12°	EXTRA FINE	2.4x90°