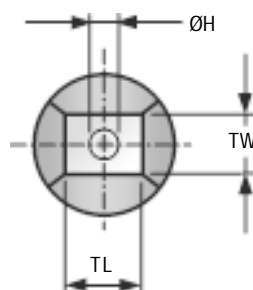
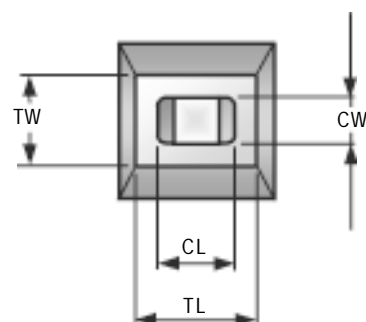


## HRTR TYPE A & B – RECTANGULAR TIP RUBBER

	Tip Type	TL x TW inch / mm	ØH / CL x CW inch / mm	Shank Insert Type
Square Face	HRTR - A3- 025 x 025	.025 x .025 / 0.63 x 0.63	.015 / 0.38	A/B
	HRTR - A3- 030 x 030	.030 x .030 / 0.76 x 0.76	.015 / 0.38	A/B
	HRTR - A3- 035 x 035	.035 x .035 / 0.89 x 0.89	.015 / 0.38	A/B
	HRTR - A3- 040 x 040	.040 x .040 / 1.02 x 1.02	.015 / 0.38	A/B
	HRTR - A2- 045 x 045	.045 x .045 / 1.14 x 1.14	.025 / 0.63	A/B
	HRTR - A2- 050 x 050	.050 x .050 / 1.27 x 1.27	.025 / 0.63	A/B
	HRTR - A1- 060 x 060	.060 x .060 / 1.52 x 1.52	.035 / 0.89	A/B
	HRTR - A1- 070 x 070	.070 x .070 / 1.78 x 1.78	.035 / 0.89	A/B
	HRTR - A1- 080 x 080	.080 x .080 / 2.03 x 2.03	.035 / 0.89	A/B
	HRTR - A1- 090 x 090	.090 x .090 / 2.29 x 2.29	.035 / 0.89	A/B
	HRTR - A1- 100 x 100	.100 x .100 / 2.54 x 2.54	.035 / 0.89	A/B
	HRTR - A1- 120 x 120	.120 x .120 / 3.05 x 3.05	.035 / 0.89	A/B
	HRTR - A3- 060 x 030	.060 x .030 / 1.52 x 0.76	.015 / 0.38	A/B
HRTR - A3- 070 x 035	.070 x .035 / 1.78 x 0.89	.015 / 0.38	A/B	
HRTR - A2- 080 x 040	.080 x .040 / 2.03 x 1.02	.025 / 0.63	A/B	
HRTR - A2- 090 x 045	.090 x .045 / 2.29 x 1.14	.025 / 0.63	A/B	
HRTR - A2- 100 x 050	.100 x .050 / 2.54 x 1.27	.025 / 0.63	A/B	
HRTR - A1- 110 x 055	.110 x .055 / 2.79 x 1.40	.035 / 0.89	A/B	
HRTR - A1- 120 x 060	.120 x .060 / 3.05 x 1.52	.035 / 0.89	A/B	
HRTR - A1- 130 x 065	.130 x .065 / 3.30 x 1.65	.035 / 0.89	A/B	
Square Face	HRTR - B - 120 x 120	.120 x .120 / 3.05 x 3.05	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 130 x 130	.130 x .130 / 3.30 x 3.30	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 140 x 140	.140 x .140 / 3.56 x 3.56	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 150 x 150	.150 x .150 / 3.81 x 3.81	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 160 x 160	.160 x .160 / 4.06 x 4.06	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 170 x 170	.170 x .170 / 4.32 x 4.32	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 180 x 180	.180 x .180 / 4.57 x 4.57	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 190 x 190	.190 x .190 / 4.83 x 4.83	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 200 x 200	.200 x .200 / 5.08 x 5.08	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 120 x 080	.120 x .080 / 3.05 x 2.03	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 140 x 090	.140 x .090 / 3.56 x 2.29	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 160 x 100	.160 x .100 / 4.06 x 2.54	.100 x .060 / 2.54 x 1.52	A/B
	HRTR - B - 180 x 120	.180 x .120 / 4.57 x 3.05	.100 x .060 / 2.54 x 1.52	A/B
HRTR - B - 200 x 140	.200 x .140 / 5.08 x 3.56	.100 x .060 / 2.54 x 1.52	A/B	



**Type A**

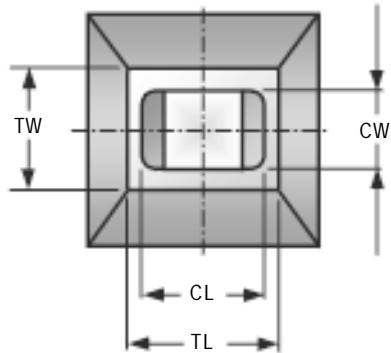


**Type B**

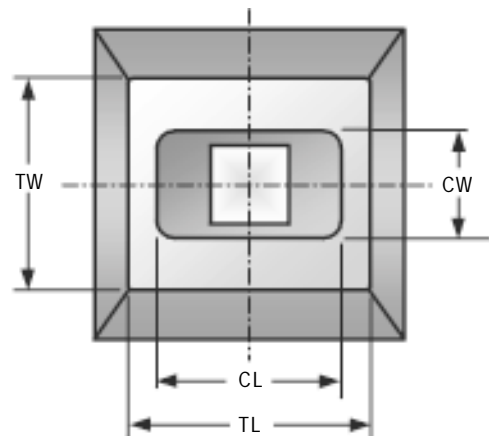
PICK UP TOOLS

## HRTR TYPE C & D - RECTANGULAR TIP RUBBER

	Tip Type	TL x TW inch / mm	CL x CW inch / mm	Shank Insert Type
<b>Square Face</b>	HRTR - C - 180 x 180	.180 x .180 / 4.57 x 4.57	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 190 x 190	.190 x .190 / 4.83 x 4.83	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 200 x 200	.200 x .200 / 5.08 x 5.08	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 220 x 220	.220 x .220 / 5.59 x 5.59	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 240 x 240	.240 x .240 / 6.10 x 6.10	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 260 x 260	.260 x .260 / 6.60 x 6.60	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 280 x 280	.280 x .280 / 7.11 x 7.11	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 300 x 300	.300 x .300 / 7.62 x 7.62	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 180 x 120	.180 x .120 / 4.57 x 3.05	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 200 x 130	.200 x .130 / 5.08 x 3.30	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 220 x 140	.220 x .140 / 5.59 x 3.56	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 240 x 150	.240 x .150 / 6.10 x 3.81	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 260 x 160	.260 x .160 / 6.60 x 4.06	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 280 x 170	.280 x .170 / 7.11 x 4.32	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 300 x 180	.300 x .180 / 7.62 x 4.57	.160 x .100 / 4.06 x 2.54	C/D
	HRTR - C - 300 x 190	.300 x .190 / 7.62 x 4.83	.160 x .100 / 4.06 x 2.54	C/D
<b>Square Face</b>	HRTR - D - 260 x 260	.260 x .260 / 6.60 x 6.60	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 280 x 280	.280 x .280 / 7.11 x 7.11	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 300 x 300	.300 x .300 / 7.62 x 7.62	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 320 x 320	.320 x .320 / 8.13 x 8.13	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 340 x 340	.340 x .340 / 8.64 x 8.64	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 360 x 360	.360 x .360 / 9.14 x 9.14	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 380 x 380	.380 x .380 / 9.65 x 9.65	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 400 x 400	.400 x .400 / 10.16 x 10.16	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 340 x 260	.340 x .260 / 8.64 x 6.60	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 360 x 270	.360 x .270 / 9.14 x 6.86	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 380 x 280	.380 x .280 / 9.65 x 7.11	.240 x .140 / 6.10 x 3.56	C/D
	HRTR - D - 400 x 300	.400 x .300 / 10.16 x 7.62	.240 x .140 / 6.10 x 3.56	C/D



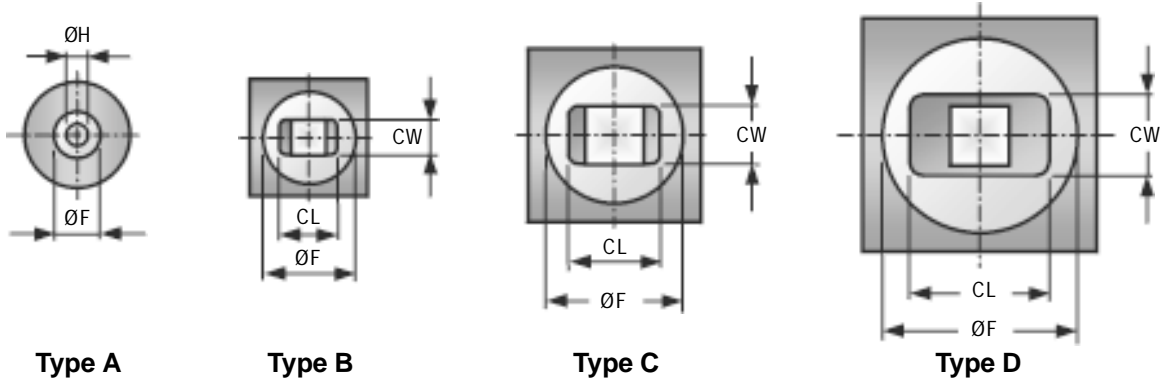
**Type C**



**Type D**

## HCTR TYPE A, B, C & D - CONICAL TIP RUBBER

	Tip Type	ØF inch / mm	ØH / CL x CW inch / mm	Shank Insert Type
Conical Face	HCTR - A3 - 025	.025 / 0.63	.015 / 0.38	A/B
	HCTR - A3 - 030	.030 / 0.76	.015 / 0.38	A/B
	HCTR - A3 - 035	.035 / 0.89	.015 / 0.38	A/B
	HCTR - A3 - 040	.040 / 1.02	.015 / 0.38	A/B
	HCTR - A2 - 045	.045 / 1.14	.025 / 0.63	A/B
	HCTR - A2 - 050	.050 / 1.27	.025 / 0.63	A/B
	HCTR - A1 - 060	.060 / 1.52	.035 / 0.89	A/B
	HCTR - A1 - 070	.070 / 1.78	.035 / 0.89	A/B
	HCTR - A1 - 080	.080 / 2.03	.035 / 0.89	A/B
	HCTR - A1 - 090	.090 / 2.29	.035 / 0.89	A/B
	HCTR - A1 - 100	.100 / 2.54	.035 / 0.89	A/B
	HCTR - A1 - 120	.120 / 3.05	.035 / 0.89	A/B
	HCTR - A1 - 130	.130 / 3.30	.035 / 0.89	A/B
	HCTR - B - 140	.140 / 3.56	.100 x .060 / 2.54 x 1.52	A/B
	HCTR - B - 160	.160 / 4.06	.100 x .060 / 2.54 x 1.52	A/B
	HCTR - B - 180	.180 / 4.57	.100 x .060 / 2.54 x 1.52	A/B
	HCTR - B - 200	.200 / 5.08	.100 x .060 / 2.54 x 1.52	A/B
	HCTR - C - 220	.220 / 5.59	.160 x .100 / 4.06 x 2.54	C/D
	HCTR - C - 240	.240 / 6.10	.160 x .100 / 4.06 x 2.54	C/D
	HCTR - C - 260	.260 / 6.60	.160 x .100 / 4.06 x 2.54	C/D
	HCTR - C - 280	.280 / 7.11	.160 x .100 / 4.06 x 2.54	C/D
	HCTR - C - 300	.300 / 7.62	.160 x .100 / 4.06 x 2.54	C/D
	HCTR - D - 320	.320 / 8.13	.240 x .140 / 6.10 x 3.56	C/D
	HCTR - D - 340	.340 / 8.64	.240 x .140 / 6.10 x 3.56	C/D
	HCTR - D - 360	.360 / 9.14	.240 x .140 / 6.10 x 3.56	C/D
	HCTR - D - 380	.380 / 9.65	.240 x .140 / 6.10 x 3.56	C/D
	HCTR - D - 400	.400 / 10.16	.240 x .140 / 6.10 x 3.56	C/D



### How To Order

TIP ONLY	Tip Configuration	Insert Type	Dimensions ØF / TLxTW	Remarks
EXAMPLE :	HCTR	- C	- 260	<i>Countersunk WT = 0.25</i>  <i>No VR</i>
	HCTR	- B	- 4.57	
	HRTR	- C	- 300 x 180	
	HCTR	- A1	- .060	
SHANK ONLY	Shank Style & Length	Insert Type		
EXAMPLE :	2102- 19	- A/B Shank		
	GS	- C/D Shank		