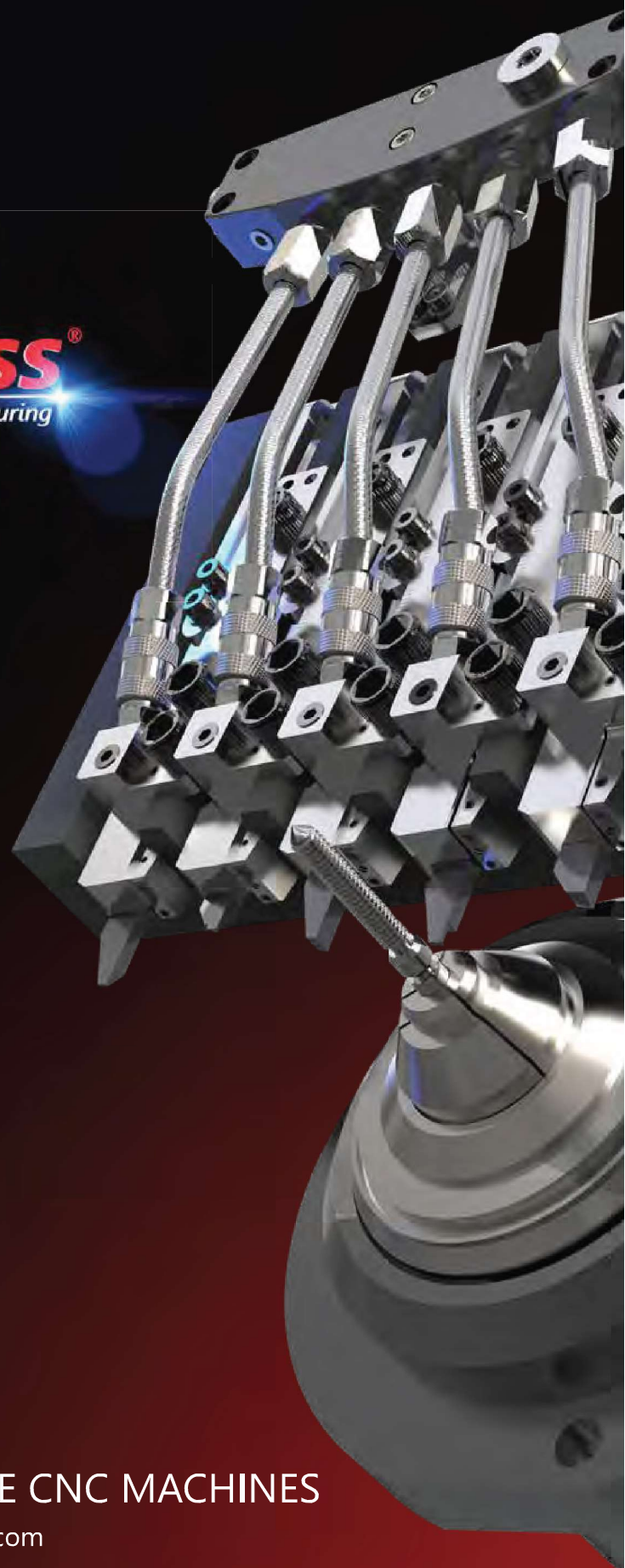




2019 Catalog

Version 10.19



TOOLING FOR SWISS-TYPE CNC MACHINES

www.genswiss.com



High Performance Thread Whirling

Thread whirling is a fast & accurate method of producing long threaded parts on a Swiss-type machine. By employing more cutting teeth, the GenSwiss/UTILIS whirling system greatly enhances productivity by allowing increased speeds and feeds while maintaining rigid finish qualities required by the medical implant industry.

- **Whirling Rings**
- **Whirling Inserts**
- **Whirling Attachments**
 - Available In Live Tooling



TYPE-A xModular-System

- Whirling ring reduces setup time
- $\pm 0.005\text{mm}$ guaranteed concentricity
- Interchangeable 2-part system



TYPE-B Mono-System

- Compact single component System
- $\pm 0.005\text{mm}$ guaranteed concentricity



TYPE-C QuickChange-System

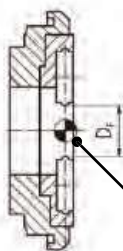
- Similar to type-A, but ring is rotated to insert or remove
- $\pm 0.005\text{mm}$ guaranteed concentricity



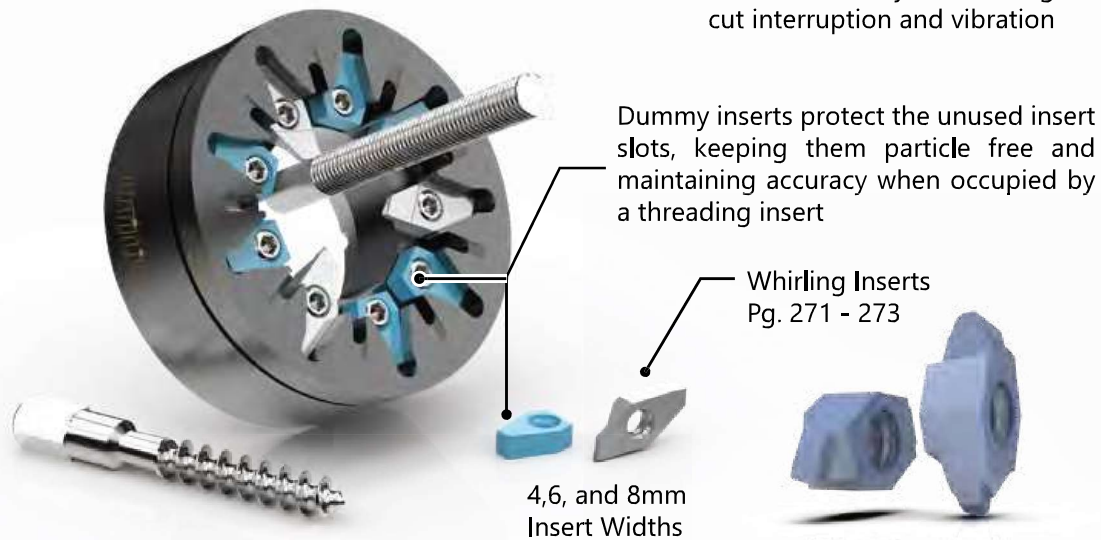
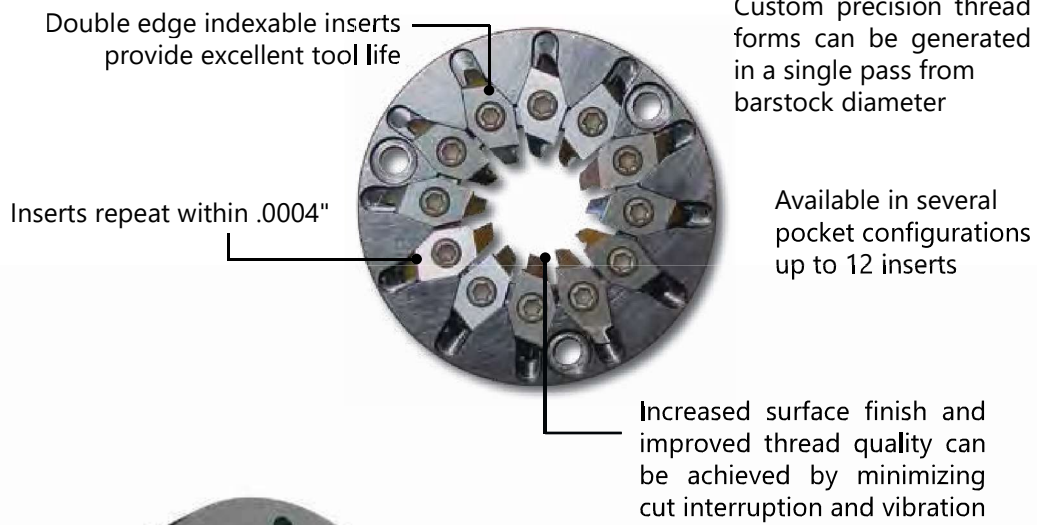
High Pressure Coolant required for adequate chip evacuation in 12 insert configuration



**For Whirling Attachments
See Live Tooling Pg. 296 - 297**



Optional Whirling Rings with advanced or recessed center position are available. Visit genswiss.com or call us for details

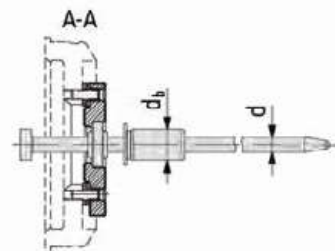
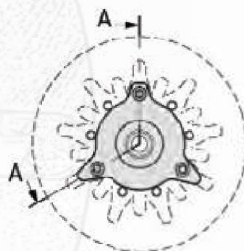


**Keep Your Whirling
Ring On-center**

Centering Device

Item No.	Description	DF	d	d _b	z
7005-127516	MWV06 07 402000	6	4	6,8,10	7
Call For Details	MWV06 00 402000	6	4	6,8,10	9, 12
Call For Details	MWV12 00 402000	12	4	6,8,10	9, 12
Call For Details	MWV15 00 402000	15	4	6,8,10	9, 12
Call For Details	MWV25 00 402000	25	4	6,8,10	9, 12

DF Flight Circle
d Needle Diameter
d_b Guide Bushing Diameter
z Number Of Whirling Ring Pockets



Type-A Thread Whirling Rings



Cutter Rings for PCM Thread Whirling Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
PCM All PCM Live Tools Are Available From GenSwiss	TOR-DE10-W15	TORNOS	6mm	7	42mm	MWT06 164 4242 115 07	6510-119103
			6mm	9	42mm	MWT06 164 4242 115 09	6510-139860
	TOR-DE20-W15-II	TORNOS	6mm	9	57mm	MWT06 164 4057 105 09	6510-149484
			8mm	9	57mm	MWT08 164 4057 105 09	Call For Details
			12mm	9	57mm	MWT12 164 4057 105 09	6510-139454
			15mm	9	57mm	MWT15 164 4057 105 09	6510-139898
			15mm	12	57mm	MWT15 164 4057 105 12	6510-119023
			6mm	9	55mm	MWT06 164 4055 103 09	Call For Details
	TOR-DE13-W15	TORNOS	8mm	9	55mm	MWT08 164 4055 103 09	Call For Details
	TOR-DE20-W15	TORNOS	12mm	9	55mm	MWT12 164 4055 103 09	6510-139823
	TOR-GW-TDM-D13	TORNOS	12mm	12	55mm	MWT12 164 4055 103 12	6510-139822
	CIT-LSW-101	CITIZEN	15mm	9	55mm	MWT15 164 4055 103 09	Call For Details
	CIT-GSW-261-000	CITIZEN	15mm	12	55mm	MWT15 164 4055 103 12	Call For Details
	CIT-KSW-101-000	CITIZEN	12mm	3	46mm	MWT12 164 4046 115 03	Call For Details
	CIT-LSW-101-L20-000	CITIZEN	12mm	9	46mm	MWT12 164 4046 115 09	6510-119397
	CIT-LSW-215-000	CITIZEN	12mm	12	46mm	MWT12 164 4046 115 12	6510-119398
	CIT-LSW-424-15	CITIZEN	15mm	9	46mm	MWT15 164 4046 115 09	Call For Details
	CIT-LSW-424-II	CITIZEN					
	CIT-MSW-101-000	CITIZEN					
	CIT-SPW-1220	CITIZEN					
	CIT-GSW-251-PR- 1-A SR20J-W20-3D	CITIZEN STAR	6mm	9	40mm	MWT06 164 4040 111 09	Call For Details
			12mm	9	40mm	MWT12 164 4040 111 09	Call For Details
			12mm	12	40mm	MWT12 164 4040 111 12	Call For Details
			15mm	9	40mm	MWT15 164 4040 111 09	Call For Details
			6mm	9	45mm	MWT06 164 4045 120 09	Call For Details
	SR20J-W20-3D	STAR	8mm	9	45mm	MWT08 164 4045 120 09	Call For Details
			12mm	9	45mm	MWT12 164 4045 120 09	6510-138887
			12mm	12	45mm	MWT12 164 4045 120 12	6510-138888
			15mm	9	45mm	MWT15 164 4045 120 09	6510-219892
	CIT-LSW-420	CITIZEN	12mm	3	46mm	MWT12 164 4546 155 03	Call For Details
			12mm	9	46mm	MWT12 164 4546 155 09	Call For Details
			12mm	12	46mm	MWT12 164 4546 155 12	Call For Details
			15mm	9	46mm	MWT15 164 4546 155 09	Call For Details
	CIT-LSW-424-000	CITIZEN	12mm	3	46mm	MWT12 164 3546 169 03	6505-149047
			12mm	9	46mm	MWT12 164 3546 169 09	6510-137876
			12mm	12	46mm	MWT12 164 3546 169 12	6510-137568
			15mm	9	46mm	MWT15 164 3546 169 09	Call For Details
	SV20-W15	STAR	8mm	9	55mm	MWT08 164 4555 130 09	Call For Details
			12mm	9	55mm	MWT12 164 4555 130 09	Call For Details
			12mm	12	55mm	MWT12 164 4555 130 12	Call For Details
			12mm	9	55mm	MWT15 164 4555 130 09	Call For Details
			15mm	12	55mm	MWT15 164 4555 130 12	Call For Details
	CIT-BSW-215 NEX-NESA-32-000	CITIZEN NEXT TURN	6mm	9	46mm	MWT06 164 4046 172 09	Call For Details
			8mm	9	46mm	MWT08 164 4046 172 09	Call For Details
			12mm	9	46mm	MWT12 164 4046 172 09	6510-139491
			12mm	12	46mm	MWT12 164 4046 172 12	6510-139452
			15mm	9	46mm	MWT15 164 4046 172 09	6510-119214
			15mm	12	46mm	MWT15 164 4046 172 12	6510-119215

Type-A Thread Whirling Rings



Cutter Rings for OEM Machine Tool Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
STAR	10159-00	STAR	6mm	9	46mm	MWT06 164 3346 165 09	Call For Details
			8mm	9	46mm	MWT08 164 3346 165 09	Call For Details
			12mm	9	46mm	MWT12 164 3346 165 09	6510-149746
			12mm	12	46mm	MWT12 164 3346 165 12	Call For Details
			15mm	09	46mm	MWT15 164 3346 165 09	Call For Details
			15mm	12	46mm	MWT15 164 3346 165 12	Call For Details
	0M171-00	STAR	6mm	9	40mm	MWT06 164 4040 111 09	Call For Details
	101-72-00		12mm	9	40mm	MWT12 164 4040 111 09	Call For Details
	421-73-00		12mm	12	40mm	MWT12 164 4040 111 12	Call For Details
	431-72-00		15mm	9	40mm	MWT15 164 4040 111 09	Call For Details
	541-78-00		6mm	9	45mm	MWT06 164 4045 120 09	Call For Details
	581-71		8mm	9	45mm	MWT08 164 4045 120 09	Call For Details
	591-72-00		12mm	9	45mm	MWT12 164 4045 120 09	6510-138887
	661-72-00		12mm	12	45mm	MWT12 164 4045 120 12	6510-138888
	7.074.191		15mm	9	45mm	MWT15 164 4045 120 09	6510-219892
	7.076.225						
	7.170.882						
	7.073.586	STAR	12mm	9	44mm	MWT12 164 4044 135 09	Call For Details
	7.073.590		12mm	12	44mm	MWT12 164 4044 135 12	6510-139177
	7.073.671		15mm	12	44mm	MWT15 164 4044 135 12	6510-139178
	7.073.765						
TSUGAMI	3268-Y271	TSUGAMI	6mm	9	65mm	MWT06 164 5265 166 09	Call For Details
	3263-Y480		8mm	9	65mm	MWT08 164 5265 166 09	Call For Details
	3234-Y342 UZ		15mm	9	65mm	MWT15 164 5265 166 09	Call For Details
	3234-Y342 GUZ		15mm	12	65mm	MWT15 164 5265 166 12	Call For Details
	3281-Y451	TSUGAMI	6mm	9	52mm	MWT06 164 5252 160 09	Call For Details
	3268-Y452		8mm	9	52mm	MWT08 164 5252 160 09	Call For Details
	3268-Y453		12mm	9	52mm	MWT12 164 5252 160 09	6510-119430
	3268-Y454		12mm	12	52mm	MWT12 164 5252 160 12	6510-119431
	3268-Y455		15mm	9	52mm	MWT15 164 5252 160 09	Call For Details
			15mm	12	52mm	MWT15 164 5252 160 12	Call For Details
TORNOS	260448	TORNOS	12mm	12	M50	MWT12 164 44M50 120 12	6510-119145
	305217	TORNOS	6mm	7	42mm	MWT06 164 4242 115 07	6510-119103
	305218		6mm	9	42mm	MWT06 164 4242 115 09	6510-139860
	199223, 306101,	TORNOS	6mm	9	57mm	MWT06 164 4057 105 09	6510-149484
	306432, 307087,		8mm	9	57mm	MTW08 164 4057 105 09	Call For Details
	398541, 418302,		12mm	9	57mm	MWT12 164 4057 105 09	6510-139454
	472088, 992381,		15mm	9	57mm	MWT15 164 4057 105 09	6510-139898
	1013013, 3281-Y691,		15mm	12	57mm	MWT15 164 4057 105 12	6510-119023
	462-2365, 462-2370						
	306279	TORNOS	6mm	9	67mm	MWT06 164 5067 120 09	Call For Details
	306281		8mm	9	67mm	MWT08 164 5067 120 09	Call For Details
	417627		15mm	9	67mm	MWT15 164 5067 120 09	Call For Details
			15mm	12	67mm	MWT15 164 5067 120 12	Call For Details
	462-2360	TORNOS	6mm	9	50mm	MWT06 164 4050 105 09	Call For Details
			8mm	9	50mm	MWT08 164 4050 105 09	Call For Details
			12mm	9	50mm	MWT12 164 4050 105 09	6510-119244
			12mm	12	50mm	MWT12 164 4050 105 12	6510-119245
			15mm	9	50mm	MWT15 164 4050 105 09	6510-119246
			15mm	12	50mm	MWT15 164 4050 105 12	6510-119247

Additional thread whirling rings available. Visit www.genswiss.com for more information.

Type-A Thread Whirling Rings



Cutter Rings for After Market Machine Tool Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
MADAULA	CZ.035.C16	CITIZEN	12mm	3	46mm	MWT12 164 3546 169 03	6505-149047
			12mm	9	46mm	MWT12 164 3546 169 09	6510-137876
			12mm	12	46mm	MWT12 164 3546 169 12	6510-137568
			15mm	9	46mm	MWT15 164 3546 169 09	Call For Details
	ST.035.34 P.035.00049 1110.00037	STAR	6mm	9	40mm	MWT06 164 4040 111 09	Call For Details
			12mm	9	40mm	MWT12 164 4040 111 09	Call For Details
			12mm	12	40mm	MWT12 164 4040 111 12	Call For Details
			15mm	9	40mm	MWT15 164 4040 111 09	Call For Details
	1110.00037	STAR	6mm	9	45mm	MWT06 164 4045 120 09	Call For Details
			8mm	9	45mm	MWT08 164 4045 120 09	Call For Details
			12mm	9	45mm	MWT12 164 4045 120 09	6510-138887
			12mm	12	45mm	MWT12 164 4045 120 12	6510-138888
	P.035.00064 1110.00054	STAR	15mm	9	45mm	MWT15 164 4045 120 09	6510-219892
			6mm	9	50mm	MWT06 164 4050 135 09	Call For Details
			8mm	9	50mm	MWT08 164 4050 135 09	Call For Details
			12mm	9	50mm	MWT12 164 4050 135 09	Call For Details
	P.035.00022	STAR	12mm	12	50mm	MWT12 164 4050 135 12	6510-119756
			15mm	9	50mm	MWT15 164 4050 135 09	Call For Details
			15mm	12	50mm	MWT15 164 4050 135 12	Call For Details
			6mm	9	67mm	MWT06 164 5067 120 09	Call For Details
	999.00444 CZ.035.L16/L20 CZ.035.L25/L35 DE.035.13/15 P.035.00002 P.035.00004 P.035.00010 P.035.00014 P.035.00023 P.035.00062 P.035.00067 TS.035.S205-15	CITIZEN	8mm	9	67mm	MWT08 164 5067 120 09	Call For Details
			12mm	9	67mm	MWT12 164 5067 120 09	Call For Details
			12mm	12	67mm	MWT12 164 5067 120 12	Call For Details
			15mm	9	67mm	MWT15 164 5067 120 09	Call For Details
	DE.035.S20 HW.035.STL HW.035.XD2 P.035.00010 P.035.00014	TORNOS	6mm	9	55mm	MWT06 164 4055 103 09	Call For Details
			8mm	9	55mm	MWT08 164 4055 103 09	Call For Details
			12mm	9	55mm	MWT12 164 4055 103 09	6510-139823
			12mm	12	55mm	MWT12 164 4055 103 12	6510-139822
	P.035.00002 P.035.00004 P.035.00010 P.035.00014 P.035.00023 P.035.00062 P.035.00067 TS.035.S205-15	HANWHA	15mm	9	55mm	MWT15 164 4055 103 09	Call For Details
			15mm	12	55mm	MWT15 164 4055 103 12	Call For Details
			15mm	9	55mm	MWT15 164 4055 103 09	Call For Details
			15mm	12	55mm	MWT15 164 4055 103 12	Call For Details
	CZ.035.M12/M16 CZ.035.M20/M32T P.035.00063 1110.00055	CITIZEN	12mm	9	48mm	MWT12 164 4548 145 09	6510-119287
			15mm	9	48mm	MWT15 164 4548 145 09	6510-119434
			15mm	12	48mm	MWT15 164 4548 145 12	6510-119435
			15mm	12	48mm	MWT15 164 4548 145 12	Call For Details

Additional thread whirling rings available. Visit www.genswiss.com for more information.

Type-A Thread Whirling Rings



Cutter Rings for After Market Machine Tool Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
JARVIS	LTR0128	CITIZEN	6mm	9	53mm	MWT06 164 4053 121 09	Call For Details
	LTR0132	CITIZEN	8mm	9	53mm	MWT08 164 4053 121 09	Call For Details
	LTR0139	CITIZEN	12mm	9	53mm	MWT12 164 4053 121 09	6510-137869
	LTR0168	CITIZEN	12mm	12	53mm	MWT12 164 4053 121 12	6510-137868
	LTR0183	CITIZEN	15mm	09	53mm	MWT15 164 4053 121 09	Call For Details
	CHS-1B6		15mm	12	53mm	MWT15 164 4053 121 12	Call For Details
			6mm	9	46mm	MWT06 164 3746 121 09	Call For Details
	LTR0131	CITIZEN	8mm	9	46mm	MWT08 164 3746 121 09	Call For Details
	LTR0169	CITIZEN	12mm	9	46mm	MWT12 164 3746 121 09	6510-137744
	LTR0170	CITIZEN	12mm	12	46mm	MWT12 164 3746 121 12	6510-119191
	CHS-2B6		15mm	09	46mm	MWT15 164 3746 121 09	Call For Details
			15mm	12	46mm	MWT15 164 3746 121 12	Call For Details
	419900001-44	STAR	12mm	9	44mm	MWT12 164 4044 135 09	Call For Details
	419900002-44	STAR	12mm	12	44mm	MWT12 164 4044 135 12	6510-139177
	419900005-44	STAR	15mm	12	44mm	MWT15 164 4044 135 12	6510-139178
WTO			6mm	9	46mm	MWT06 164 4046 240 09	Call For Details
			6mm	9	46mm	MWT06 164 4046 300 09	Call For Details
			12mm	9	46mm	MWT12 164 4046 240 09	6510-139891
			12mm	9	46mm	MWT12 164 4046 300 09	Call For Details
	419900001-44	STAR	12mm	12	46mm	MWT12 164 4046 240 12	6510-139890
			12mm	12	46mm	MWT12 164 4046 300 12	Call For Details
			15mm	15	46mm	MWT15 164 4046 240 09	6510-149328
			15mm	15	46mm	MWT15 164 4046 300 09	Call For Details
			15mm	15	46mm	MWT15 164 4046 240 12	6510-149364
			15mm	15	46mm	MWT15 164 4046 300 12	Call For Details

Additional thread whirling rings available. Visit www.genswiss.com for more information.

Type-B Thread Whirling Rings



Cutter Rings for PCM Thread Whirling Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
PCM All PCM Live Tools Are Available From GenSwiss	STA-E20-WI-000	STAR	6mm	7	35	MWT06 164 2035 165 07	6510-119007
	CIT-GSW-101-000	CITIZEN	6mm	9	35	MWT06 164 2035 165 09	6510-138657
	CIT-LSW-515-000	CITIZEN					
	CIT-LSW-515-PR	CITIZEN	12mm	9	45	MWT12 164 4045 100 09	Call For Details

Cutter Rings for OEM Machine Tool Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
Citizen	BTW-1000		12mm	9	47mm	MWT12 164 3347 145 09	6510-000115
	BTW-2000		12mm	9	47mm	MWT12 164 3347 145 12	6510-138034
	BTW-5000		12mm	12	47mm	MWT12 166 3347 145 09	6510-219591
	BTW-6000	CITIZEN	12mm	9	47mm	MWT12 166 3347 145 12	Call For Details
	BTW-3000		12mm	12	47mm	MWT12 168 3347 145 09	6510-149537
	BTW-3100		12mm	9	46mm	MWT12 164 2546 070 09	6510-119980
	BTW-4000		12mm	12	46mm	MTW12 164 2546 070 12	Call For Details
STAR	7.073.590	STAR	12mm	9	44mm	MWT12 164 4044 100 09	6510-119460
			12mm	12	44mm	MWT12 164 4044 100 12	6510-119463
	7.074.260	STAR	12mm	9	53mm	MWT12 164 4253 310 09	6510-119900
	7.079.555		12mm	12	53mm	MWT12 164 4253 310 12	6510-119901
TORNOS	307232	TORNOS	6mm	7	51mm	MWT06 164 3151 200 07	6510-149100
	386251		6mm	9	51mm	MWT06 164 3151 200 09	6510-149101
	398856						
	417165						
	417174						
DMG	418212	TORNOS	12mm	9	41mm	MWT12 164 M1441 440 09	6510-149750
	570952						
	2123031						
	2647002	DMG	12mm	9	49mm	MWT12 164 4249 120 09	6510-119676
	2723028						
	2858071						

Cutter Rings for After Market Machine Tool Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
Madaula	CZ.035.K12/K16	CITIZEN	6mm	7	35mm	MWT06 164 2035 165 07	6510-119007
			6mm	9	35mm	MWT06 164 2035 165 09	6510-138657
			12mm	9	44mm	MWT12 164 4244 105 09	6510-119351
WTO	419900000-00/-25/-32/-35/-39		12mm	9	44mm	MWT12 164 4244 105 12	6510-119012
	/-40/-46/-50/-55/		12mm	12	44mm		
	419900001-00/-32/-35						
	419900002-30/-32/-34/-55						
	419900003-30/-32/-50						
	419900004-30/-32						
	419900005-30/44						
	419900006-30						
	419900007-30/-44						
	419900008-44						
	419900009-30						
	419900000-45, 419900001-46		6mm	7	56mm	MWT06 164 5456 125 07	6510-149501
	419900002-35, 419900003-34,		6mm	9	56mm	MWT06 164 5456 125 09	6510-149502
	419900003-35, 419900005-32,		12mm	9	56mm	MWT12 164 5456 125 09	6510-149503
	419900006-32, 419900007-32,		12mm	12	56mm	MWT12 164 5456 125 12	6510-149504
	419900010-30, 419900010-44,		15mm	9	56mm	MWT15 164 5456 125 09	6510-149505
	419900011-30, 419900011-44,		15mm	12	56mm	MWT15 164 5456 125 12	6510-149506
	419900012-30, 419900013-30,		25mm	9	56mm	MWT25 164 5456 125 09	6510-149507
	TN762006		25mm	12	56mm	MWT25 164 5456 125 12	6510-149508

Type-C Thread Whirling Rings



Cutter Rings for PCM Thread Whirling Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
PCM All PCM Live Tools Are Available From GenSwiss	LSW-215-000	CITIZEN	12mm	9	60mm	MWT12 164 4060 130 09 QC	Call For Details
			12mm	12	60mm	MWT12 164 4060 130 12 QC	6510-119986
	LSW-424-000	CITIZEN	12mm	3	46mm	MWT12 164 3546 169 03 QC	Call For Details
			6mm	7	38mm	MWT06 164 252838 120 07	Call For Details
	GSW-210	CITIZEN	6mm	9	38mm	MWT06 164 252838 120 09	6510-219374
			6mm	7	36mm	MWT06 164 2536 126 07	Call For Details
	SR-10J-GSW-010	STAR	6mm	9	36mm	MWT06 164 2536 126 09	6510-149654
			6mm	9	36mm	MWT06 164 2536 126 09	6510-149654

Cutter Rings for OEM Machine Tool Attachments

Live Tool Manufacturer	Spindle Model	Machine Make	Flight Circle	# of Insert Pockets	Ring OD	Whirling Rings	Item No.
TORNOS	306101	TORNOS	6mm	7	57mm	MWT06 164 4057 105 07 QC	Call For Details
			6mm	9	57mm	MWT06 164 4057 105 09 QC	Call For Details
			8mm	9	57mm	MWT08 164 4057 105 09 QC	Call For Details
			12mm	9	57mm	MWT12 164 4057 105 09 QC	Call For Details
			12mm	12	57mm	MWT12 164 4057 105 12 QC	Call For Details
			15mm	9	57mm	MWT15 164 4057 105 09 QC	Call For Details
			15mm	12	57mm	MWT15 164 4057 105 12 QC	Call For Details

Special Thread Whirling Holders For Non Swiss Machines

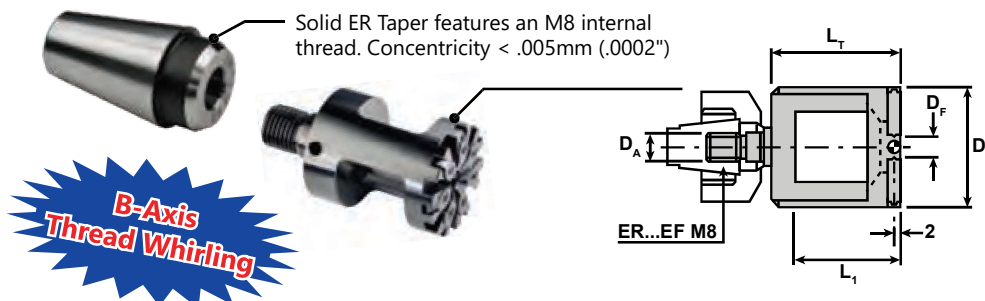
Whirling Tool For ER Style Live Spindles

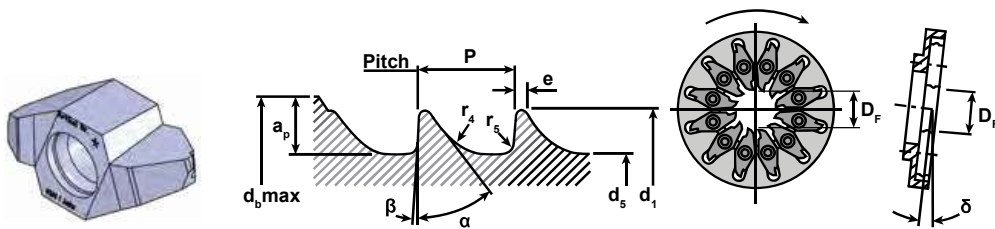
Item No.	Description	D _F	D _A	D _K	z*	L _T	L ₁
6510-119512	MWT06 164 0400 07	6	M8	35	7	44	32.5

z*: Number of Teeth

Threaded Solid ER Style Collets

Threaded ER Collets	ER	Thread
ER16 EF M8	16	M8
ER20 EF M8	20	M8
ER25 EF M8	25	M8



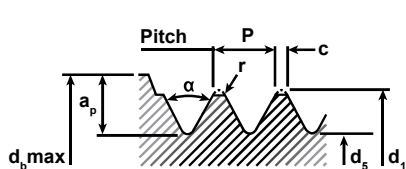


ISO Spec. Buttress Thread Form (MWI... HA/HB... VP)

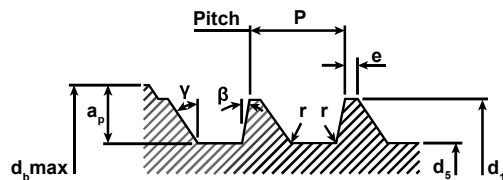
D_F = Flight Circle

Item No.	Description	ISO 5835	D_F	d_1	d_s	tol	P	δ	e	r_4	r_5	α	β	a_p	d_b Max Stock $\varnothing$	Coating
Call For Details	MWI06 164 HA1.5 VP UHM20 HPX	HA1.5	6	1.5	1.1	0/-0.1	0.50	7.3°	0.1	0.3	0.1	35°	3°	3	7.0	UHM 20 HPX
6505-119046	MWI06 164 HA1.5 VP UHM30 HX	HA1.5	6	1.5	1.1	0/-0.1	0.50	7.3°	0.1	0.3	0.1	35°	3°	3	7.0	UHM 30 HX
Call For Details	MWI06 164 HA2.0 VP UHM20 HPX	HA2.0	6	2.0	1.3	0/-0.1	0.60	6.9°	0.1	0.4	0.2	35°	3°	3	7.0	UHM 20 HPX
6505-119047	MWI06 164 HA2.0 VP UHM30 HX	HA2.0	6	2.0	1.3	0/-0.1	0.60	6.9°	0.1	0.4	0.2	35°	3°	3	7.0	UHM 30 HX
Call For Details	MWI06 164 HA2.7 VP UHM20 HPX	HA2.7	6	2.7	1.9	0/-0.1	1.00	8.1°	0.1	0.6	0.2	35°	3°	3	7.5	UHM 20 HPX
6505-119053	MWI06 164 HA2.7 VP UHM30 HX	HA2.7	6	2.7	1.9	0/-0.1	1.00	8.1°	0.1	0.6	0.2	35°	3°	3	7.5	UHM 30 HX
Call For Details	MWI12 164 HA1.5 VP UHM20 HPX	HA1.5	12	1.5	1.1	0/-0.1	0.50	7.3°	0.1	0.3	0.1	35°	3°	4	9.0	UHM 20 HPX
Call For Details	MWI12 164 HA1.5 VP UHM30 HX	HA1.5	12	1.5	1.1	0/-0.1	0.50	7.3°	0.1	0.3	0.1	35°	3°	4	9.0	UHM 30 HX
Call For Details	MWI12 164 HA2.0 VP UHM20 HPX	HA2.0	12	2.0	1.3	0/-0.1	0.60	6.9°	0.1	0.4	0.1	35°	3°	4	9.0	UHM 20 HPX
Call For Details	MWI12 164 HA2.0 VP UHM30 HX	HA2.0	12	2.0	1.3	0/-0.1	0.60	6.9°	0.1	0.4	0.1	35°	3°	4	9.0	UHM 30 HX
Call For Details	MWI12 164 HA2.7 VP UHM20 HPX	HA2.7	12	2.7	1.9	0/-0.15	1.00	8.1°	0.1	0.6	0.2	35°	3°	4	9.5	UHM 20 HPX
6505-119778	MWI12 164 HA2.7 VP UHM30 HX	HA2.7	12	2.7	1.9	0/-0.15	1.00	8.1°	0.1	0.6	0.2	35°	3°	4	9.5	UHM 30 HX
6505-149150	MWI12 164 HA3.5 VP UHM20 HPX	HA3.5	12	3.5	2.4	0/-0.15	1.25	7.9°	0.1	0.8	0.2	35°	3°	4	10.0	UHM 20 HPX
Call For Details	MWI12 164 HA3.5 VP UHM30 HX	HA3.5	12	3.5	2.4	0/-0.15	1.25	7.9°	0.1	0.8	0.2	35°	3°	4	10.0	UHM 30 HX
Call For Details	MWI12 164 HA4.0 VP UHM20 HPX	HA4.0	12	4.0	2.9	0/-0.15	1.50	8.1°	0.1	0.8	0.2	35°	3°	4	10.5	UHM 20 HPX
6505-139033	MWI12 164 HA4.0 VP UHM30 HX	HA4.0	12	4.0	2.9	0/-0.15	1.50	8.1°	0.1	0.8	0.2	35°	3°	4	10.5	UHM 30 HX
Call For Details	MWI12 164 HA4.5 VP UHM20 HPX	HA4.5	12	4.5	3.0	0/-0.15	1.75	8.6°	0.1	1.0	0.3	35°	3°	4	11.0	UHM 20 HPX
Call For Details	MWI12 164 HA4.5 VP UHM30 HX	HA4.5	12	4.5	3.0	0/-0.15	1.75	8.6°	0.1	1.0	0.3	35°	3°	4	11.0	UHM 30 HX
Call For Details	MWI12 164 HA5.0 VP UHM20 HPX	HA5.0	12	5.0	3.5	0/-0.15	1.75	7.6°	0.2	1.0	0.3	35°	3°	4	11.0	UHM 20 HPX
Call For Details	MWI12 164 HA5.0 VP UHM30 HX	HA5.0	12	5.0	3.5	0/-0.15	1.75	7.6°	0.2	1.0	0.3	35°	3°	4	11.0	UHM 30 HX
6505-219339	MWI12 164 HB4.0 VP UHM20 HPX	HB4.0	12	4.0	1.9	0/-0.15	1.75	11.0°	0.1	0.8	0.3	25°	5°	4	9.5	UHM 20 HPX
6505-149055	MWI12 164 HB4.0 VP UHM30 HX	HB4.0	12	4.0	1.9	0/-0.15	1.75	11.0°	0.1	0.8	0.3	25°	5°	4	9.5	UHM 30 HX
Call For Details	MWI12 164 HB6.5 VP UHM20 HPX	HB6.5	12	6.5	3.0	0/-0.15	2.75	10.6°	0.2	1.2	0.8	25°	5°	4	11.0	UHM 20 HPX
Call For Details	MWI12 164 HB6.5 VP UHM30 HX	HB6.5	12	6.5	3.0	0/-0.15	2.75	10.6°	0.2	1.2	0.8	25°	5°	4	11.0	UHM 30 HX

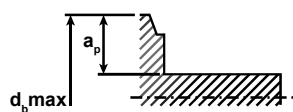
Also Available...



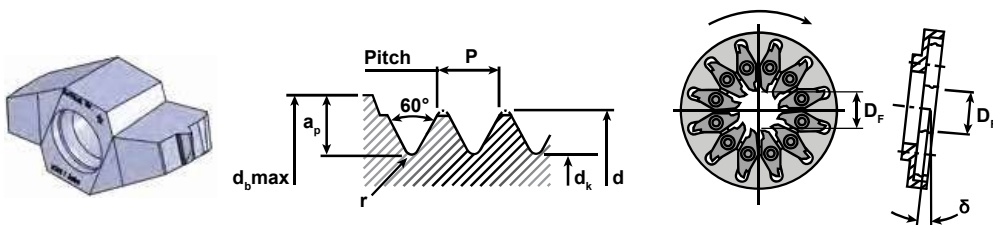
HC Profiles ISO 9268



HD Profiles ISO 9268



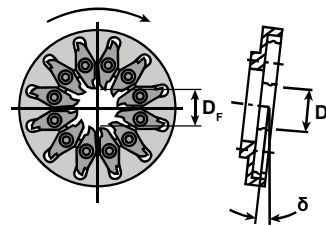
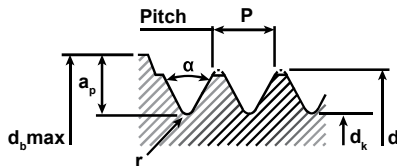
Cylindrical Whirling



ISO / DIN Spec Metric Threads

D_F = Flight Circle

Item No.	Description	ISO DIN13	D_F	d	d_k	P	δ	r	a_p	d_b Max Stock Ø	Coating
Call For Details	MWI06 164 M1.4 VP UHM20 HPX	M1.4	6	1.4	1.012	0.30	4.53°	.033	3	6.5	UHM 20 HPX
6505-119343	MWI06 164 M1.4 VP UHM30 HX	M1.4	6	1.4	1.012	0.30	4.53°	.033	3	6.5	UHM 30 HX
Call For Details	MWI06 164 M1.6 VP UHM20 HPX	M1.6	6	1.6	1.151	0.35	4.63°	.041	3	7.0	UHM 20 HPX
6505-119303	MWI06 164 M1.6 VP UHM30 HX	M1.6	6	1.6	1.151	0.35	4.63°	.041	3	7.0	UHM 30 HX
Call For Details	MWI06 164 M2x0.25 VP UHM20 HPX	M2x0.25	6	2.0	1.693	0.25	2.50°	.036	3	7.5	UHM 20 HPX
6505-119208	MWI06 164 M2x0.25 VP UHM30 HX	M2x0.25	6	2.0	1.693	0.25	2.50°	.036	3	7.5	UHM 30 HX
Call For Details	MWI06 164 M2 VP UHM20 HPX	M2	6	2.0	1.509	0.40	4.17°	.048	3	7.0	UHM 20 HPX
6505-119087	MWI06 164 M2 VP UHM30 HX	M2	6	2.0	1.509	0.40	4.17°	.048	3	7.0	UHM 30 HX
Call For Details	MWI06 164 M3x0.35 VP UHM20 HPX	M3x0.35	6	3.0	2.571	0.35	2.30°	.051	3	8.5	UHM 20 HPX
6505-119089	MWI06 164 M3x0.35 VP UHM30 HX	M3x0.35	6	3.0	2.571	0.35	2.30°	.051	3	8.5	UHM 30 HX
Call For Details	MWI06 164 M3 VP UHM20 HPX	M3	6	3.0	2.387	0.50	3.39°	.062	3	8.0	UHM 20 HPX
6505-139167	MWI06 164 M3 VP UHM30 HX	M3	6	3.0	2.387	0.50	3.39°	.062	3	8.0	UHM 30 HX
Call For Details	MWI12 164 M1.6 VP UHM20 HPX	M1.6	12	1.6	1.151	0.35	4.63°	.041	4	9.0	UHM 20 HPX
6505-119301	MWI12 164 M1.6 VP UHM30 HX	M1.6	12	1.6	1.151	0.35	4.63°	.041	4	9.0	UHM 30 HX
Call For Details	MWI12 164 M2x0.25 VP UHM20 HPX	M2x0.25	12	2.0	1.693	0.25	2.50°	.036	4	9.5	UHM 20 HPX
Call For Details	MWI12 164 M2x0.25 VP UHM30 HX	M2x0.25	12	2.0	1.693	0.25	2.50°	.036	4	9.5	UHM 30 HX
Call For Details	MWI12 164 M2 VP UHM20 HPX	M2	12	2.0	1.509	0.40	4.17°	.048	4	9.0	UHM 20 HPX
6505-139166	MWI12 164 M2 VP UHM30 HX	M2	12	2.0	1.509	0.40	4.17°	.048	4	9.0	UHM 30 HX
Call For Details	MWI12 164 M2.5 VP UHM20 HPX	M2.5	12	2.5	1.928	0.45	3.70°	.055	4	9.5	UHM 20 HPX
6505-119459	MWI12 164 M2.5 VP UHM30 HX	M2.5	12	2.5	1.928	0.45	3.70°	.055	4	9.5	UHM 30 HX
Call For Details	MWI12 164 M3x0.35 VP UHM20 HPX	M3x0.35	12	3.0	2.571	0.35	2.30°	.051	4	10.5	UHM 20 HPX
Call For Details	MWI12 164 M3x0.35 VP UHM30 HX	M3x0.35	12	3.0	2.571	0.35	2.30°	.051	4	10.5	UHM 30 HX
Call For Details	MWI12 164 M3 VP UHM20 HPX	M3	12	3.0	2.387	0.50	3.39°	.062	4	10.0	UHM 20 HPX
6505-119204	MWI12 164 M3 VP UHM30 HX	M3	12	3.0	2.387	0.50	3.39°	.062	4	10.0	UHM 30 HX
Call For Details	MWI12 164 M3.5 VP UHM20 HPX	M3.5	12	3.5	2.744	0.60	3.50°	.077	4	8.5	UHM 20 HPX
6505-119633	MWI12 164 M3.5 VP UHM30 HX	M3.5	12	3.5	2.744	0.60	3.50°	.077	4	8.5	UHM 30 HX
Call For Details	MWI12 164 M4x0.35 VP UHM20 HPX	M4x0.35	12	4.0	3.387	0.35	2.50°	.072	4	11.0	UHM 20 HPX
Call For Details	MWI12 164 M4x0.35 VP UHM30 HX	M4x0.35	12	4.0	3.387	0.35	2.50°	.072	4	11.0	UHM 30 HX
Call For Details	MWI12 164 M4 VP UHM20 HPX	M4	12	4.0	3.141	0.70	3.58°	.091	4	11.0	UHM 20 HPX
6505-139165	MWI12 164 M4 VP UHM30 HX	M4	12	4.0	3.141	0.70	3.58°	.091	4	11.0	UHM 30 HX
Call For Details	MWI12 164 M5x0.5 VP UHM20 HPX	M5x0.5	12	5.0	4.387	0.50	1.90°	.072	4	12.0	UHM 20 HPX
Call For Details	MWI12 164 M5x0.5 VP UHM30 HX	M5x0.5	12	5.0	4.387	0.50	1.90°	.072	4	12.0	UHM 30 HX
Call For Details	MWI12 164 M5 VP UHM20 HPX	M5	12	5.0	4.019	0.80	3.24°	.105	4	11.5	UHM 20 HPX
6505-139168	MWI12 164 M5 VP UHM30 HX	M5	12	5.0	4.019	0.80	3.24°	.105	4	11.5	UHM 30 HX
Call For Details	MWI12 164 M6x0.75 VP UHM20 HPX	M6x0.75	12	6.0	5.080	0.75	2.50°	.108	4	13.0	UHM 20 HPX
Call For Details	MWI12 164 M6x0.75 VP UHM30 HX	M6x0.75	12	6.0	5.080	0.75	2.50°	.108	4	13.0	UHM 30 HX
Call For Details	MWI12 164 M6 VP UHM20 HPX	M6	12	6.0	4.773	1.00	3.39°	.134	4	12.5	UHM 20 HPX
6505-139169	MWI12 164 M6 VP UHM30 HX	M6	12	6.0	4.773	1.00	3.39°	.134	4	12.5	UHM 30 HX
Call For Details	MWI12 164 M7 VP UHM20 HPX	M7	12	7.0	5.753	1.00	2.86°	.134	4	13.5	UHM 20 HPX
Call For Details	MWI12 164 M7 VP UHM30 HX	M7	12	7.0	5.753	1.00	2.86°	.134	4	13.5	UHM 30 HX
Call For Details	MWI12 164 M8x0.75 VP UHM20 HPX	M8x0.75	12	8.0	7.080	0.75	1.80°	.108	4	15.0	UHM 20 HPX
Call For Details	MWI12 164 M8x0.75 VP UHM30 HX	M8x0.75	12	8.0	7.080	0.75	1.80°	.108	4	15.0	UHM 30 HX
Call For Details	MWI12 164 M8 VP UHM20 HPX	M8	12	8.0	6.466	1.30	3.15°	.170	4	14.0	UHM 20 HPX
6505-139171	MWI12 164 M8 VP UHM30 HX	M8	12	8.0	6.466	1.30	3.15°	.170	4	14.0	UHM 30 HX
Call For Details	MWI12 164 M8x1.0 VP UHM20 HPX	M8x1	12	8.0	6.773	1.00	2.50°	.144	4	14.5	UHM 20 HPX
Call For Details	MWI12 164 M8x1.0 VP UHM30 HX	M8x1	12	8.0	6.773	1.00	2.50°	.144	4	14.5	UHM 30 HX
Call For Details	MWI12 164 M10x0.75 VP UHM20 HPX	M10x0.75	12	10.0	9.080	0.75	1.40°	.108	4	17.0	UHM 20 HPX
Call For Details	MWI12 164 M10x0.75 VP UHM30 HX	M10x0.75	12	10.0	9.080	0.75	1.40°	.108	4	17.0	UHM 30 HX
Call For Details	MWI12 164 M10x1.0 VP UHM20 HPX	M10x1.0	12	10.0	8.773	1.00	1.90°	.144	4	16.5	UHM 20 HPX
Call For Details	MWI12 164 M10x1.0 VP UHM30 HX	M10x1.0	12	10.0	8.773	1.00	1.90°	.144	4	16.5	UHM 30 HX
Call For Details	MWI12 164 M10x1.25 VP UHM20 HPX	M10x1.25	12	10.0	8.466	1.25	2.50°	.180	4	16.0	UHM 20 HPX
Call For Details	MWI12 164 M10x1.25 VP UHM30 HX	M10x1.25	12	10.0	8.466	1.25	2.50°	.180	4	16.0	UHM 30 HX
Call For Details	MWI12 164 M10 VP UHM20 HPX	M10	12	10.0	8.160	1.50	3.01°	.207	4	16.0	UHM 20 HPX
6505-119363	MWI12 164 M10 VP UHM30 HX	M10	12	10.0	8.160	1.50	3.01°	.207	4	16.0	UHM 30 HX



UNC & UNF Threads

D_F = Flight Circle

TPI (P)	Item No.	Description	D_F	d	d_k	δ	r	a	a_p	d_b Max Stock Ø	Coating
16 TPI	Call For Details	MWI12 164 3/8-16UNC VP UHM20 HPX	12	.375in	.298in	3.39°	.0086in	60°	4	17.0	UHM 20 HPX
16 TPI	6505-149280	MWI12 164 3/8-16UNC VP UHM30 HX	12	.375in	.298in	3.39°	.0086in	60°	4	17.0	UHM 30 HX
18 TPI	Call For Details	MWI12 164 5/16-18UNC VP UHM20 HPX	12	.313in	.244in	3.63°	.0076in	60°	4	15.5	UHM 20 HPX
18 TPI	Call For Details	MWI12 164 5/16-18UNC VP UHM30 HX	12	.313in	.244in	3.63°	.0076in	60°	4	15.5	UHM 30 HX
20 TPI	Call For Details	MWI12 164 1/4-20UNC VP UHM20 HPX	12	.250in	.188in	4.16°	.0068in	60°	4	14.0	UHM 20 HPX
20 TPI	6505-219578	MWI12 164 1/4-20UNC VP UHM30 HX	12	.250in	.188in	4.16°	.0068in	60°	4	14.0	UHM 30 HX
24 TPI	Call For Details	MWI12 164 10-24UNC VP UHM20 HPX	12	.190in	.138in	4.62°	.0056in	60°	4	12.5	UHM 20 HPX
24 TPI	6505-149272	MWI12 164 10-24UNC VP UHM30 HX	12	.190in	.138in	4.62°	.0056in	60°	4	12.5	UHM 30 HX
24 TPI	Call For Details	MWI12 164 12-24UNC VP UHM20 HPX	12	.216in	.164in	3.99°	.0056in	60°	4	13.0	UHM 20 HPX
24 TPI	Call For Details	MWI12 164 12-24UNC VP UHM30 HX	12	.216in	.164in	3.99°	.0056in	60°	4	13.0	UHM 30 HX
24 TPI	Call For Details	MWI12 164 5/16-24UNF VP UHM20 HPX	12	.312in	.261in	2.65°	.0056in	60°	4	15.5	UHM 20 HPX
24 TPI	Call For Details	MWI12 164 5/16-24UNF VP UHM30 HX	12	.312in	.261in	2.65°	.0056in	60°	4	15.5	UHM 30 HX
24 TPI	Call For Details	MWI12 164 3/8-24UNF VP UHM20 HPX	12	.375in	.323in	2.18°	.0056in	60°	4	17.5	UHM 20 HPX
24 TPI	6505-119663	MWI12 164 3/8-24UNF VP UHM30 HX	12	.375in	.323in	2.18°	.0056in	60°	4	17.5	UHM 30 HX
28 TPI	Call For Details	MWI12 164 1/4-28UNF VP UHM20 HPX	12	.250in	.205in	2.86°	.0047in	60°	4	14.0	UHM 20 HPX
28 TPI	6505-119659	MWI12 164 1/4-28UNF VP UHM30 HX	12	.250in	.205in	2.86°	.0047in	60°	4	14.0	UHM 30 HX
28 TPI	Call For Details	MWI12 164 12-28UNF VP UHM20 HPX	12	.216in	.171in	3.36°	.0047in	60°	4	11.0	UHM 20 HPX
28 TPI	6505-119657	MWI12 164 12-28UNF VP UHM30 HX	12	.216in	.171in	3.36°	.0047in	60°	4	11.0	UHM 30 HX
32 TPI	Call For Details	MWI12 164 06-32UNC VP UHM20 HPX	12	.138in	.099in	4.8°	.0041in	60°	4	11.0	UHM 20 HPX
32 TPI	6505-149270	MWI12 164 06-32UNC VP UHM30 HX	12	.138in	.099in	4.8°	.0041in	60°	4	11.0	UHM 30 HX
32 TPI	Call For Details	MWI12 164 08-32UNC VP UHM20 HPX	12	.164in	.125in	3.94°	.0041in	60°	4	12.0	UHM 20 HPX
32 TPI	Call For Details	MWI12 164 08-32UNC VP UHM30 HX	12	.164in	.125in	3.94°	.0041in	60°	4	12.0	UHM 30 HX
32 TPI	Call For Details	MWI12 164 10-32UNF VP UHM20 HPX	12	.190in	.151in	3.34°	.0041in	60°	4	10.5	UHM 20 HPX
32 TPI	6505-119655	MWI12 164 10-32UNF VP UHM30 HX	12	.190in	.151in	3.34°	.0041in	60°	4	10.5	UHM 30 HX
36 TPI	Call For Details	MWI12 164 08-36UNF VP UHM20 HPX	12	.164in	.129in	3.45°	.0036in	60°	4	12.0	UHM 20 HPX
36 TPI	6505-119653	MWI12 164 08-36UNF VP UHM30 HX	12	.164in	.129in	3.45°	.0036in	60°	4	12.0	UHM 30 HX
40 TPI	Call For Details	MWI12 164 04-40UNC VP UHM20 HPX	12	.112in	.081in	4.73°	.0032in	60°	4	10.5	UHM 20 HPX
40 TPI	6505-149266	MWI12 164 04-40UNC VP UHM30 HX	12	.112in	.081in	4.73°	.0032in	60°	4	10.5	UHM 30 HX
40 TPI	Call For Details	MWI12 164 05-40UNC VP UHM20 HPX	12	.125in	.094in	4.17°	.0032in	60°	4	11.0	UHM 20 HPX
40 TPI	Call For Details	MWI12 164 05-40UNC VP UHM30 HX	12	.125in	.094in	4.17°	.0032in	60°	4	11.0	UHM 30 HX
40 TPI	Call For Details	MWI12 164 06-40UNF VP UHM20 HPX	12	.138in	.106in	3.72°	.0032in	60°	4	11.0	UHM 20 HPX
40 TPI	6505-119651	MWI12 164 06-40UNF VP UHM30 HX	12	.138in	.106in	3.72°	.0032in	60°	4	11.0	UHM 30 HX
44 TPI	Call For Details	MWI12 164 05-44UNF VP UHM20 HPX	12	.125in	.096in	3.74°	.0028in	60°	4	11.0	UHM 20 HPX
44 TPI	6505-119649	MWI12 164 05-44UNF VP UHM30 HX	12	.125in	.096in	3.74°	.0028in	60°	4	11.0	UHM 30 HX
48 TPI	Call For Details	MWI12 164 03-48UNC VP UHM20 HPX	12	.099in	.073in	4.42°	.0026in	60°	4	10.0	UHM 20 HPX
48 TPI	Call For Details	MWI12 164 03-48UNC VP UHM30 HX	12	.099in	.073in	4.42°	.0026in	60°	4	10.0	UHM 30 HX
48 TPI	Call For Details	MWI12 164 04-48UNF VP UHM20 HPX	12	.112in	.085in	3.84°	.0025in	60°	4	10.5	UHM 20 HPX
48 TPI	Call For Details	MWI12 164 04-48UNF VP UHM30 HX	12	.112in	.085in	3.84°	.0025in	60°	4	10.5	UHM 30 HX
56 TPI	Call For Details	MWI12 164 02-56UNC VP UHM20 HPX	12	.086in	.063in	4.35°	.0022in	60°	4	10.0	UHM 20 HPX
56 TPI	6505-119840	MWI12 164 02-56UNC VP UHM30 HX	12	.086in	.063in	4.35°	.0022in	60°	4	10.0	UHM 30 HX
56 TPI	Call For Details	MWI12 164 03-56UNF VP UHM20 HPX	12	.099in	.076in	3.71°	.0021in	60°	4	10.0	UHM 20 HPX
56 TPI	6505-119647	MWI12 164 03-56UNF VP UHM30 HX	12	.099in	.076in	3.71°	.0021in	60°	4	10.0	UHM 30 HX
64 TPI	Call For Details	MWI12 164 01-64UNC VP UHM20 HPX	12	.073in	.053in	4.51°	.0019in	60°	4	9.5	UHM 20 HPX
64 TPI	Call For Details	MWI12 164 01-64UNC VP UHM30 HX	12	.073in	.053in	4.51°	.0019in	60°	4	9.5	UHM 30 HX
64 TPI	Call For Details	MWI12 164 02-64UNF VP UHM20 HPX	12	.086in	.066in	4.90°	.0018in	60°	4	9.5	UHM 20 HPX
64 TPI	6505-119645	MWI12 164 02-64UNF VP UHM30 HX	12	.086in	.066in	4.90°	.0018in	60°	4	9.5	UHM 30 HX
72 TPI	Call For Details	MWI12 164 01-72UNF VP UHM20 HPX	12	.072in	.055in	3.95°	.0016in	60°	4	9.5	UHM 20 HPX
72 TPI	6505-119643	MWI12 164 01-72UNF VP UHM30 HX	12	.072in	.055in	3.95°	.0016in	60°	4	9.5	UHM 30 HX
80 TPI	Call For Details	MWI12 164 00-80UNF VP UHM20 HPX	12	.060in	.044in	4.38°	.0014in	60°	4	9.0	UHM 20 HPX
80 TPI	6505-119641	MWI12 164 00-80UNF VP UHM30 HX	12	.060in	.044in	4.38°	.0014in	60°	4	9.0	UHM 30 HX