

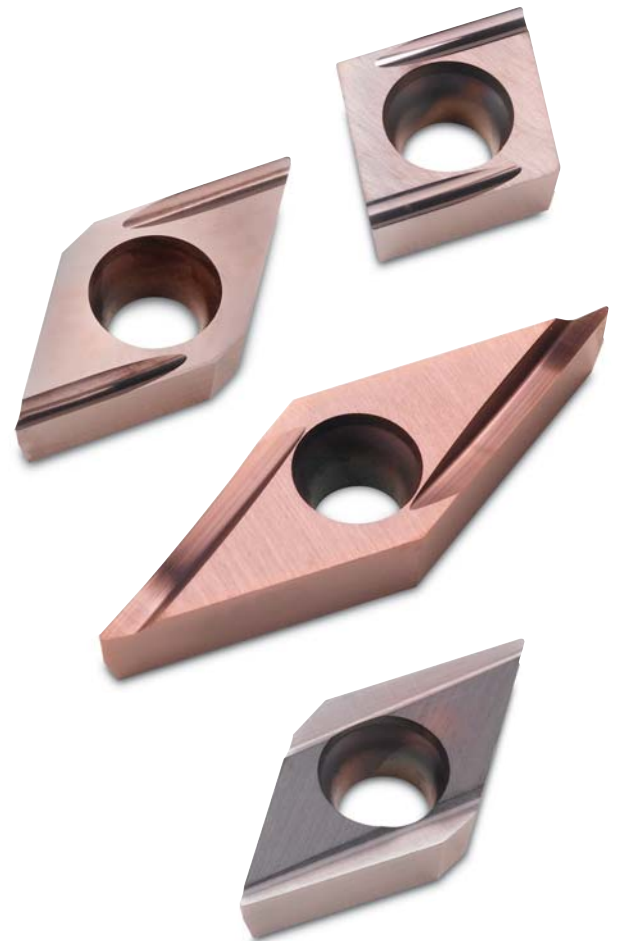
Introducing...

Kennametal's Expanded Offering of OD Tooling for Small Parts Machining

*...specifically engineered to maximize
productivity in small parts turning
applications!*

- Three screw-on insert styles to match your application needs.
- New carbide and PVD-coated grades deliver long tool life.
- Available as standard:
 - Right-hand and left-hand inserts
 - Production-friendly, side actuated clamp toolholders
- Achieve optimum performance in steels, stainless steels, alloys, and non-ferrous materials.

➤ **DISTRIBUTED BY:**



Markets and Applications

- O.D. toolholders are specifically designed for Swiss machines, gang-type machines, and other small lathes.
- Inserts deliver excellent performance in steels, stainless steels, titanium, and non-ferrous materials.
- Ideally suited for small parts applications in the Aerospace, Medical, and General Engineering industries.

Featured Application:

Operation: Turning

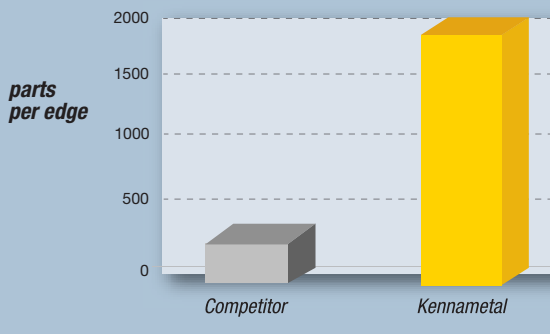
Workpiece: Hub

Material: 1045

Results: 1,700 more parts per edge

	COMPETITOR	KENNAMETAL
grade:	PVD-coated carbide	KC5020P
material:	1045 (normalized)	1045 (normalized)
speed:	450 sfm	450 sfm
feed:	.003 ipr	.003 ipr
depth of cut:	.016"	.016"
coolant:	Internal	Internal
parts per edge:	300	2,000

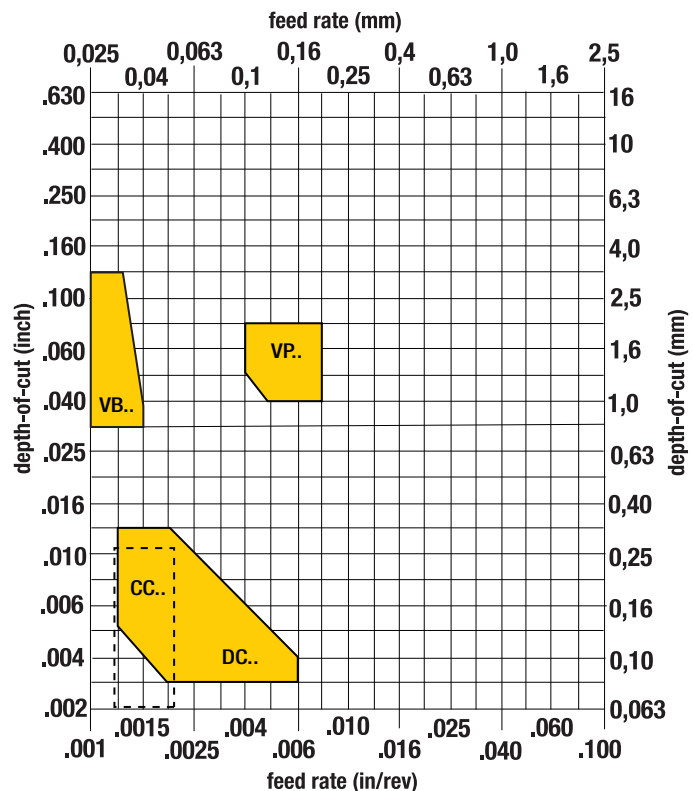
566% more parts per edge



Grade Information for Kennametal O.D. Turning Inserts

type	grade	composition and application
Carbide	K1010P™	composition: Advanced carbide grade. application: The K1010P grade is highly wear-resistant and offers good thermal conductivity and anti-chipping performance. Delivers stability at slow cutting speeds in non-ferrous and heat-resistant materials.
PVD-coated carbide	KC5020P™	composition: TiCN PVD coating with a super micro-grain carbide substrate for high bending strength. application: The KC5020P grade is applicable for a wide range of precision machining applications requiring stability, long tool life, and good surface finish. Recommended for use in carbon steels, alloy steels, and stainless steels.

Recommended Feed Rates for O.D. Turning Insert Style



Geometry Selection for OD Turning Inserts

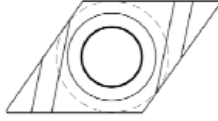


Figure 1

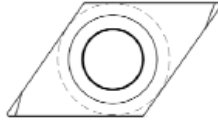


Figure 2



Figure 3

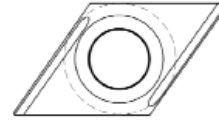


Figure 4

insert geometry	insert style								application information	chip groove style
	CC..		DC..		VB..		VP..			
	ET	GT	ET	GT	ET	GT	ET	ET		
FM		•		•					Low to medium feed with sharp edge; non-ferrous materials	Figure 1
LF						•		•	Medium feeds	Figure 2
MFE				•					Low feed with honed edge	Figure 3
MFF				•					Low feed with sharp edge	Figure 3
MFSF			•	•					High-precision low feed with sharp edge	Figure 3
SF				•		•			Low feed with sharp edge	Figure 2
SF					•			•	High-precision low feed with sharp edge	Figure 2
UME		•							Low feed with honed edge	Figure 4
UMF	•		•		•			•	High-precision low feed with sharp edge	Figure 4
UMF		•		•					Low feed with sharp edge	Figure 4

Recommended Starting Conditions

Low-Carbon (< 0,3% C) and Free-Machining Steel

AISI: 1008, 1010, 1018, 1020, 1026, 10L18, 10L45, 10L50, 1108, 1117, 1141, 1151, 11L44, 1200 series, and 12L14

Material Group	grade	Speed – sfm (m/min)														Starting Conditions ◀▶		
		25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	sfm	m/min
		(8)	(15)	(30)	(46)	(61)	(76)	(91)	(107)	(122)	(137)	(152)	(168)	(183)	(198)	(213)		
P 1	K1010P																60	18
	KC5020P																320	100

Medium-and High-Carbon Steels (> 0,3% C)

AISI: 1035, 1040, 1045, 1055, 1080, 1085, 1090, 1095, 1525, 1541, 1548, 1551, 1561, and 1572

Material Group	grade	Speed – sfm (m/min)														Starting Conditions ◀▶		
		25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	sfm	m/min
		(8)	(15)	(30)	(46)	(61)	(76)	(91)	(107)	(122)	(137)	(152)	(168)	(183)	(198)	(213)		
P 2	KC5020P																320	100

Alloy Steels and Tool Steels (≤ 330 HB) (≤ 35 HRC)

Alloy Steels: AISI 1300, 2000, 3000, 4000, 5000, 6000, 7000, and 8000 series steels. Tool Steels: SAE classes: M and T; hot and cold work SAE classes, A, D, H, O, and S; wrought high carbon/low alloy W1, W2, L2, P1, P6, and P20

Material Group	grade	Speed – sfm (m/min)														Starting Conditions ◀▶		
		25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	sfm	m/min
		(8)	(15)	(30)	(46)	(61)	(76)	(91)	(107)	(122)	(137)	(152)	(168)	(183)	(198)	(213)		
P 3	KC5020P																320	100

Ferritic, Martensitic, and PH Stainless Steel (≤ 330 HB) (≤ 35 HRC)

400 and 500 series, and precipitation hardening (PH) AISI: 410, 416, 416F, 416Se, 420F, 430F, 4389F Se, 440, 440C, 502, 504, 17-4PH, PH 13-8 Mo, and 15-5 PH

Material Group	grade	Speed – sfm (m/min)														Starting Conditions ◀▶		
		25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	sfm	m/min
		(8)	(15)	(30)	(46)	(61)	(76)	(91)	(107)	(122)	(137)	(152)	(168)	(183)	(198)	(213)		
P 5	KC5020P																200	61



Ferritic, Martensitic, and PH Stainless Steels (340–450 HB) (36–48 HRC)

400 and 500 series, and precipitation hardening (PH) AISI: 410, 416, 416F, 416Se, 420F, 430F, 4389F Se, 440, 440C, 502, 504, 17-4PH, PH 13-8 Mo, and 15-5 PH



Material Group	grade	Speed – sfm (m/min)														Starting Conditions ◀▶		
		25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	sfm	m/min
		(8)	(15)	(30)	(46)	(61)	(76)	(91)	(107)	(122)	(137)	(152)	(168)	(183)	(198)	(213)		
P 6	KC5020P																150	45

Recommended Starting Conditions, continued




Austenitic Stainless Steel: AISI: 200, 201, 202, 209, 219, 301, 302, 303, 304, 304L, 305, 309

Material Group	grade	Speed – sfm (m/min)														Starting Conditions 		
		25 (8)	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (107)	400 (122)	450 (137)	500 (152)	550 (168)	600 (183)	650 (198)	700 (213)	sfm	m/min
M 1	KC5020P																288	90




Austenitic Stainless Steel: AISI: 310, 314, 316, 316L, 317, 321, 347, 384 ASTM Cast: XM-1, XM-5, XM-7, XM-21

Material Group	grade	Speed – sfm (m/min)														Starting Conditions 		
		25 (8)	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (107)	400 (122)	450 (137)	500 (152)	550 (168)	600 (183)	650 (198)	700 (213)	sfm	m/min
M 2	KC5020P																288	90

Low-Silicon Aluminum Alloys (Hypoeutectic < 12.2% Si) and Magnesium Alloys

Material Group	grade	Speed – sfm (m/min)											Starting Conditions 					
		600 (182)	700 (213)	800 (244)	900 (274)	1000 (305)	1200 (366)	1400 (427)	1600 (488)	1700 (518)	1800 (549)	2000 (610)	sfm	m/min				
N 1	K1010P																1250	381
	KC5020P																	1300




Copper, Brass, Zinc-Based on a Machinability Index Range of 70-100

Material Group	grade	Speed – sfm (m/min)											Starting Conditions 					
		150 (46)	200 (91)	300 (91)	400 (121)	500 (152)	600 (182)	700 (213)	800 (244)	900 (274)	1000 (305)	1100 (335)	2000 (366)	sfm	m/min			
N 3	K1010P																650	198
	KC5020P																	700

Recommended Starting Conditions, continued




Cobalt-Based, Heat-Resistant Alloys (150–425 HB) (≤ 45 HRC)

Wrought: AiResist 213, Haynes 25 (L605), Haynes 188, J-1570, Stellite Cast: AiResist 13, Haynes 21, MAR-M302, MAR-M509, NASA Co-W-Re, WI-52

Material Group	grade	Speed – sfm (m/min)														Starting Conditions 		
		25 (8)	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (197)	400 (122)	450 (137)	500 (152)	550 (168)	600 (183)	650 (198)	700 (213)	sfm	m/min
S 2	K1010P																80	24
	KC5020P																75	23




Nickel-Based, Heat-Resistant Alloys (140–475 HB) (≤ 48 HRC)

Astrolloy, Hastelloy B/C/C-276/X, Inconel 601/617/625/700/706/718, IN102, Incoloy 901, MAR-M200, Nimonic, Rene 41, Udimet, Waspaloy, Monel

Material Group	grade	Speed – sfm (m/min)														Starting Conditions 		
		25 (8)	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (197)	400 (122)	450 (137)	500 (152)	550 (168)	600 (183)	650 (198)	700 (213)	sfm	m/min
S 3	K1010P																100	30
	KC5020P																185	56

Titanium and Titanium Alloys (110–450 HB) (≤ 48 HRC)

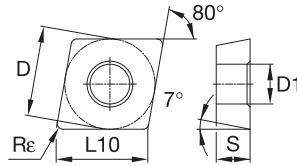
Pure: Ti98.8, Ti99.9 Alloyed: Ti-5Al-2.5Sn, Ti-6Al-4V, Ti-6Al-2Sn-4Zr-2Mo, Ti-3Al-8V-6Cr-4Mo-4Zr, Ti-10V-2Fe-3Al, Ti-13V-11Cr-3Al

Material Group	grade	Speed – sfm (m/min)														Starting Conditions 		
		25 (8)	50 (15)	100 (30)	150 (46)	200 (61)	250 (76)	300 (91)	350 (197)	400 (122)	450 (137)	500 (152)	550 (168)	600 (183)	650 (198)	700 (213)	sfm	m/min
S 4	K1010P																175	53
	KC5020P																185	56

For more information or to place an order, please contact your Kennametal Representative or Authorized Kennametal Distributor, or visit www.kennametal.com.

80° Diamond — Screw-On

- FM, UME, and UMF geometries available.
- No geometry designation indicates flat-top insert.

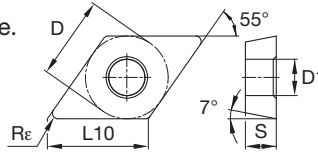


■ CC..

ISO catalog number	ANSI catalog number	D		L10		S		Re		D1		K1010P	KC5020P
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
right hand													
CCET060201RUMF	CCET21502RUMF	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCET060202RUMF	CCET21505RUMF	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCET09T301RUMF	CCET32502RUMF	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCET09T302RUMF	CCET32505RUMF	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT060201	CCGT21502	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCGT060202	CCGT21505	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCGT060204	CCGT2151	.250	6,35	.254	6,45	.094	2,38	.016	0,4	.110	2,80	●	●
CCGT09T301	CCGT32502	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCGT09T302	CCGT32505	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T304	CCGT3251	.375	9,53	.381	9,68	.156	3,97	.016	0,4	.173	4,40	●	●
CCGT060201RUME	CCGT21502RUME	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCGT060202RUME	CCGT21505RUME	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCGT060204RUME	CCGT2151RUME	.250	6,35	.254	6,45	.094	2,38	.016	0,4	.110	2,80	●	●
CCGT09T301RUME	CCGT32502RUME	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCGT09T302RUME	CCGT32505RUME	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T304RUME	CCGT3251RUME	.375	9,53	.381	9,68	.156	3,97	.016	0,4	.173	4,40	●	●
CCGT0602003RUMF	CCGT21501RUMF	.250	6,35	.254	6,45	.094	2,38	.001	0,03	.110	2,80	●	●
CCGT060200RUMF	CCGT21500RUMF	.250	6,35	.254	6,45	.094	2,38	.000	0,0	.110	2,80	●	●
CCGT060201RUMF	CCGT21502RUMF	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCGT060202RUMF	CCGT21505RUMF	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCGT09T3003RUMF	CCGT32501RUMF	.375	9,53	.381	9,68	.156	3,97	.000	0,0	.173	4,40	●	●
CCGT09T300RUMF	CCGT32500RUMF	.375	9,53	.381	9,68	.156	3,97	.000	0,0	.173	4,40	●	●
CCGT09T301RUMF	CCGT32502RUMF	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCGT09T302RUMF	CCGT32505RUMF	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T302RFM	CCGT32505RFM	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T304RFM	CCGT3251RFM	.375	9,53	.381	9,68	.156	3,97	.016	0,4	.173	4,40	●	●
CCGT09T308RFM	CCGT3252RFM	.375	9,53	.381	9,68	.156	3,97	.031	0,8	.173	4,40	●	●
CCGT120402RFM	CCGT4305RFM	.500	12,7	.508	12,9	.188	4,76	.008	0,2	.217	5,51	●	●
CCGT120404RFM	CCGT431RFM	.500	12,7	.508	12,9	.188	4,76	.016	0,4	.217	5,51	●	●
CCGT120408RFM	CCGT432RFM	.500	12,7	.508	12,9	.188	4,76	.031	0,8	.217	5,51	●	●
CCGW09T300	CCGW32500	.375	9,53	.381	9,68	.156	3,97	.000	0,0	.173	4,40	●	●
CCGW09T301	CCGW32502	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCGW09T302	CCGW32505	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGW09T304	CCGW3251	.375	9,53	.381	9,68	.156	3,97	.016	0,4	.173	4,40	●	●
left hand													
CCET060201LUMF	CCET21502LUMF	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCET060202LUMF	CCET21505LUMF	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCET09T301LUMF	CCET32502LUMF	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCET09T302LUMF	CCET32505LUMF	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT060201LUME	CCGT21502LUME	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCGT060202LUME	CCGT21505LUME	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCGT060204LUME	CCGT2151LUME	.250	6,35	.254	6,45	.094	2,38	.016	0,4	.110	2,80	●	●
CCGT09T301LUME	CCGT32502LUME	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCGT09T302LUME	CCGT32505LUME	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T304LUME	CCGT3251LUME	.375	9,53	.381	9,68	.156	3,97	.016	0,4	.173	4,40	●	●
CCGT0602003LUMF	CCGT21501LUMF	.250	6,35	.254	6,45	.094	2,38	.001	0,03	.110	2,80	●	●
CCGT060200LUMF	CCGT21500LUMF	.250	6,35	.254	6,45	.094	2,38	.000	0,0	.110	2,80	●	●
CCGT060201LUMF	CCGT21502LUMF	.250	6,35	.254	6,45	.094	2,38	.004	0,1	.110	2,80	●	●
CCGT060202LUMF	CCGT21505LUMF	.250	6,35	.254	6,45	.094	2,38	.008	0,2	.110	2,80	●	●
CCGT09T3003LUMF	CCGT32501LUMF	.375	9,53	.381	9,68	.156	3,97	.001	0,03	.173	4,40	●	●
CCGT09T300LUMF	CCGT32500LUMF	.375	9,53	.381	9,68	.156	3,97	.000	0,0	.173	4,40	●	●
CCGT09T301LUMF	CCGT32502LUMF	.375	9,53	.381	9,68	.156	3,97	.004	0,1	.173	4,40	●	●
CCGT09T302LUMF	CCGT32505LUMF	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T302LFM	CCGT32505LFM	.375	9,53	.381	9,68	.156	3,97	.008	0,2	.173	4,40	●	●
CCGT09T304LFM	CCGT3251LFM	.375	9,53	.381	9,68	.156	3,97	.016	0,4	.173	4,40	●	●
CCGT09T308LFM	CCGT3252LFM	.375	9,53	.381	9,68	.156	3,97	.031	0,8	.173	4,40	●	●
CCGT120402LFM	CCGT4305LFM	.500	12,7	.508	12,9	.188	4,76	.008	0,2	.217	5,51	●	●
CCGT120404LFM	CCGT431LFM	.500	12,7	.508	12,9	.188	4,76	.016	0,4	.217	5,51	●	●
CCGT120408LFM	CCGT432LFM	.500	12,7	.508	12,9	.188	4,76	.031	0,8	.217	5,51	●	●

55° Diamond — Screw-On

- FM, MFE, MFF, MFSF, SF, and UMF geometries available.
- No geometry designation indicates flat-top insert.

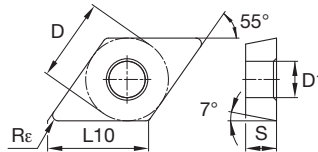


■ DC..

ISO catalog number	ANSI catalog number	D		L10		S		Re		D1		K1010P	KC5020P
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
right hand													
DCET070201RSF	DCET21502RSF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79	●	●
DCET070202RSF	DCET21505RSF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79	●	●
DCET070204RSF	DCET2151RSF	.250	6,35	.305	7,75	.094	2,39	.016	0,40	.110	2,79	●	●
DCET11T301RSF	DCET32502RSF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCET11T302RSF	DCET32505RSF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCET11T304RSF	DCET3251RSF	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●
DCET11T301RMFSF	DCET32502RMFSF	.375	9,53	.305	7,75	.156	3,96	.004	0,10	.173	4,39	●	●
DCET11T302RMFSF	DCET32505RMFSF	.375	9,53	.305	7,75	.156	3,96	.008	0,20	.173	4,39	●	●
DCET070201RUMF	DCET21502RUMF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79	●	●
DCET070202RUMF	DCET21505RUMF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79	●	●
DCET11T301RUMF	DCET32502RUMF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCET11T302RUMF	DCET32505RUMF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT070201	DCGT21502	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79	●	●
DCGT070202	DCGT21505	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79	●	●
DCGT070204	DCGT2151	.250	6,35	.305	7,75	.094	2,39	.016	0,40	.110	2,79	●	●
DCGT11T301	DCGT32502	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCGT11T302	DCGT32505	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT11T304	DCGT3251	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●
DCGT11T302RFM	DCGT32505RFM	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT11T304RFM	DCGT3251RFM	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●
DCGT0702003RSF	DCGT21501RSF	.250	6,35	.305	7,75	.094	2,39	.001	0,03	.110	2,79	●	●
DCGT070201RSF	DCGT21502RSF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79	●	●
DCGT070202RSF	DCGT21505RSF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79	●	●
DCGT070204RSF	DCGT2151RSF	.250	6,35	.305	7,75	.094	2,39	.016	0,40	.110	2,79	●	●
DCGT11T3003RSF	DCGT32501RSF	.375	9,53	.458	11,63	.156	3,96	.001	0,03	.173	4,39	●	●
DCGT11T301RSF	DCGT32502RSF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCGT11T302RSF	DCGT32505RSF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT11T304RSF	DCGT3251RSF	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●
DCGT11T3003RMFE	DCGT32501RMFE	.375	9,53	.458	11,63	.156	3,96	.001	0,03	.173	4,39	●	●
DCGT11T301RMFE	DCGT32502RMFE	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCGT11T302RMFE	DCGT32505RMFE	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT11T304RMFE	DCGT3251RMFE	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●
DCGT11T301RMFF	DCGT32502RMFF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCGT11T302RMFF	DCGT32505RMFF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT070201RUME	DCGT21502RUME	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79	●	●
DCGT070202RUME	DCGT21505RUME	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79	●	●
DCGT070204RUME	DCGT2151RUME	.250	6,35	.305	7,75	.094	2,39	.016	0,40	.110	2,79	●	●
DCGT11T301RUME	DCGT32502RUME	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCGT11T302RUME	DCGT32505RUME	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT11T304RUME	DCGT3251RUME	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●
DCGT0702003RUMF	DCGT21501RUMF	.250	6,35	.305	7,75	.094	2,39	.001	0,03	.110	2,79	●	●
DCGT070201RUMF	DCGT21502RUMF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79	●	●
DCGT070202RUMF	DCGT21505RUMF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79	●	●
DCGT11T300RUMF	DCGT32500RUMF	.375	9,53	.458	11,63	.156	3,96	.000	0,00	.173	4,39	●	●
DCGT11T3003RUMF	DCGT32501RUMF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39	●	●
DCGT11T301RUMF	DCGT32502RUMF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	●
DCGT11T302RUMF	DCGT32505RUMF	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	●

55° Diamond — Screw-On, continued

- FM, MFE, MFF, MFSF, SF, and UMF geometries available.
- No geometry designation indicates flat-top insert.



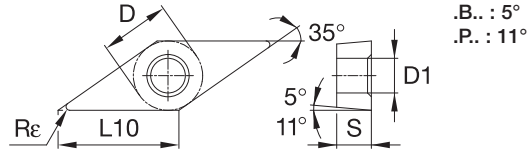
■ DC..

ISO catalog number	ANSI catalog number	D		L10		S		Re		D1		K1010P	KC5020P
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		
left hand													
DCET070201LSF	DCET21502LSF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79		●
DCET070202LSF	DCET21505LSF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79		●
DCET070204LSF	DCET2151LSF	.375	9,53	.305	7,75	.094	2,39	.016	0,40	.110	2,79		●
DCET11T301LSF	DCET32502LSF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCET11T302LSF	DCET32505LSF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●
DCET11T304LSF	DCET3251LSF	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39		●
DCET11T301LMFSF	DCET32502LMFSF	.375	9,53	.305	7,75	.156	3,96	.004	0,10	.173	4,39		●
DCET11T302LMFSF	DCET32505LMFSF	.375	9,53	.305	7,75	.156	3,96	.008	0,20	.173	4,39		●
DCET070201LUMF	DCET21502LUMF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79		●
DCET070202LUMF	DCET21505LUMF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79		●
DCET11T301LUMF	DCET32502LUMF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCET11T302LUMF	DCET32505LUMF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●
DCGT11T302LFM	DCGT32505LFM	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39	●	
DCGT11T304LFM	DCGT3251LFM	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39	●	
DCGT0702003LSF	DCGT21501LSF	.250	6,35	.305	7,75	.094	2,39	.001	0,03	.110	2,79		●
DCGT070201LSF	DCGT21502LSF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79		●
DCGT070202LSF	DCGT21505LSF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79		●
DCGT070204LSF	DCGT2151LSF	.250	6,35	.305	7,75	.094	2,39	.016	0,40	.110	2,79		●
DCGT11T3003LSF	DCGT32501LSF	.375	9,53	.458	11,63	.156	3,96	.001	0,03	.173	4,39		●
DCGT11T301LSF	DCGT32502LSF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCGT11T302LSF	DCGT32505LSF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●
DCGT11T304LSF	DCGT3251LSF	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39		●
DCGT11T3003LMFE	DCGT32501LMFE	.375	9,53	.458	11,63	.156	3,96	.001	0,03	.173	4,39		●
DCGT11T301LMFE	DCGT32502LMFE	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCGT11T302LMFE	DCGT32505LMFE	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●
DCGT11T304LMFE	DCGT3251LMFE	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39		●
DCGT11T301LMFF	DCGT32502LMFF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCGT11T302LMFF	DCGT32505LMFF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●
DCGT070201LUME	DCGT21502LUME	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79		●
DCGT070202LUME	DCGT21505LUME	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79		●
DCGT070204LUME	DCGT2151LUME	.250	6,35	.305	7,75	.094	2,39	.016	0,40	.110	2,79		●
DCGT11T301LUME	DCGT32502LUME	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCGT11T302LUME	DCGT32505LUME	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●
DCGT11T304LUME	DCGT3251LUME	.375	9,53	.458	11,63	.156	3,96	.016	0,40	.173	4,39		●
DCGT0702003LUMF	DCGT21501LUMF	.250	6,35	.305	7,75	.094	2,39	.001	0,03	.110	2,79		●
DCGT070201LUMF	DCGT21502LUMF	.250	6,35	.305	7,75	.094	2,39	.004	0,10	.110	2,79		●
DCGT070202LUMF	DCGT21505LUMF	.250	6,35	.305	7,75	.094	2,39	.008	0,20	.110	2,79		●
DCGT11T301LUMF	DCGT32502LUMF	.375	9,53	.458	11,63	.156	3,96	.004	0,10	.173	4,39		●
DCGT11T302LUMF	DCGT32505LUMF	.375	9,53	.458	11,63	.156	3,96	.008	0,20	.173	4,39		●

For more information or to place an order, please contact your Kennametal Representative or Authorized Kennametal Distributor, or visit www.kennametal.com.

35° Diamond — Screw-On

• LF, SF, and UMF geometries available.



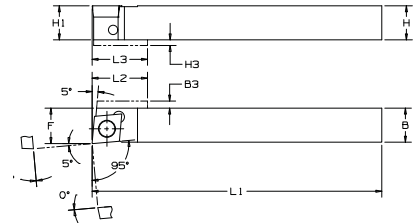
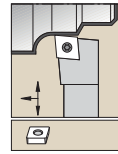
■ VB../VP..

ISO catalog number	ANSI catalog number	D		L10		S		Rε		D1		KC5020P
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
right hand												
VBET1103003RSF	VBET2201RSF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VBET110301RSF	VBET2202RSF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VBET110302RSF	VBET2205RSF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VBGT1103003RSF	VBGT2201RF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VBGT110301RSF	VBGT2202RF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VBGT110302RSF	VBGT2205RF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VBGT1103003RLF	VBGT2201RLF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VBGT110301RLF	VBGT2202RLF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VBGT110302RLF	VBGT2205RLF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VBGT110304RLF	VBGT221RLF	.250	6,35	.436	11,07	.125	3,18	.016	0,40	.110	2,79	●
VBGT110308RLF	VBGT222RLF	.250	6,35	.436	11,07	.125	3,18	.031	0,80	.110	2,79	●
VBGT160402RLF	VBGT3305RLF	.375	9,53	.654	16,61	.188	4,76	.008	0,20	.173	4,40	●
VBGT160404RLF	VBGT331RLF	.375	9,53	.654	16,61	.188	4,76	.016	0,40	.173	4,40	●
VBGT160408RLF	VBGT332RLF	.375	9,53	.654	16,61	.188	4,76	.031	0,80	.173	4,40	●
VPET080201RSF	VPET151502RSF	.187	4,76	.327	8,30	.094	2,38	.004	0,10	.091	2,31	●
VPET080202RSF	VPET151505RSF	.187	4,76	.327	8,30	.094	2,38	.008	0,20	.091	2,31	●
VPET110300RSF	VPET2200RSF	.250	6,35	.436	11,07	.125	3,18	.000	0,00	.110	2,79	●
VPET1103003RSF	VPET2201RSF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VPET110301RSF	VPET2202RSF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VPET110302RSF	VPET2205RSF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VPET080201RUMF	VPET151502RUMF	.187	4,76	.327	8,30	.094	2,38	.004	0,10	.091	2,31	●
VPET080202RUMF	VPET151505RUMF	.187	4,76	.327	8,30	.094	2,38	.008	0,20	.091	2,31	●
VPET1103003RUMF	VPET2201RUMF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VPET110301RUMF	VPET2202RUMF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VPET110302RUMF	VPET2205RUMF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
left hand												
VBET1103003LSF	VBET2201LSF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VBET110301LSF	VBET2202LSF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VBET110302LSF	VBET2205LSF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VBGT1103003LSF	VBGT2201LSF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VBGT110301LSF	VBGT2202LSF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VBGT110302LSF	VBGT2205LSF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VBGT1103003LLF	VBGT2201LLF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VBGT110301LLF	VBGT2202LLF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VBGT110302LLF	VBGT2205LLF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VBGT110304LLF	VBGT221LLF	.250	6,35	.436	11,07	.125	3,18	.016	0,40	.110	2,79	●
VBGT110308LLF	VBGT222LLF	.250	6,35	.436	11,07	.125	3,18	.031	0,80	.110	2,79	●
VBGT160402LLF	VBGT3305LLF	.375	9,53	.654	16,61	.188	4,76	.008	0,20	.173	4,40	●
VBGT160404LLF	VBGT331LLF	.375	9,53	.654	16,61	.188	4,76	.016	0,40	.173	4,40	●
VBGT160408LLF	VBGT332LLF	.375	9,53	.654	16,61	.188	4,76	.031	0,80	.173	4,40	●
VPET080201LSF	VPET151502LSF	.187	4,76	.327	8,30	.094	2,38	.004	0,10	.091	2,31	●
VPET080202LSF	VPET151505LSF	.187	4,76	.327	8,30	.094	2,38	.008	0,20	.091	2,31	●
VPET110301LSF	VPET2202LSF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VPET110301LSF	VPET2202LSF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VPET110302LSF	VPET2205LSF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●
VPET080201LUMF	VPET151502LUMF	.187	4,76	.327	8,30	.094	2,38	.004	0,10	.091	2,31	●
VPET080202LUMF	VPET151505LUMF	.187	4,76	.327	8,30	.094	2,38	.008	0,20	.091	2,31	●
VPET1103003LUMF	VPET2201LUMF	.250	6,35	.436	11,07	.125	3,18	.001	0,03	.110	2,79	●
VPET110301LUMF	VPET2202LUMF	.250	6,35	.436	11,07	.125	3,18	.004	0,10	.110	2,79	●
VPET110302LUMF	VPET2205LUMF	.250	6,35	.436	11,07	.125	3,18	.008	0,20	.110	2,79	●

OD Toolholders

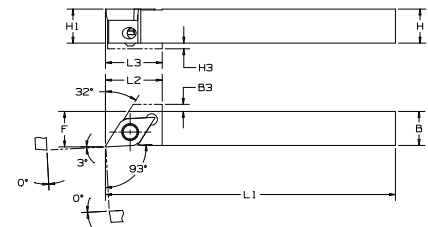
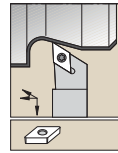
External/Facing Toolholders (CC.. style inserts)

■ PCLC



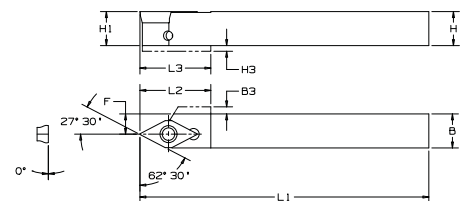
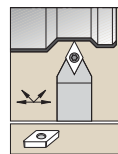
order number	catalog number	H=H1	B	B3	H3	L1	L2	L3	F	pin	screw	clamp	wrench
right hand													
3617721	PCLCR0810K-06F	8	10	2	—	125	19	—	10,5	LPF11	MS2218	—	FH2
3617723	PCLCR1010K-06F	10	10	—	—	125	—	—	10,5	LPF11	MS2218	—	FH2
3617725	PCLCR1010K-09F	10	10	2	2,5	125	16	16	10,0	LPF13	MS2218	—	FH2
3617727	PCLCR1212M-09F	12	12	—	—	150	—	—	12,5	LPF13	MS2218	—	FH2
3617729	PCLCR1616M-09F	16	16	—	—	150	—	—	16,5	LPF17	MS2218	—	FH2
left hand													
3617722	PCLCL0810K-06F	8	10	2	—	125	19	—	10,5	LPF11	MS2217	—	FH2
3617724	PCLCL1010K-06F	10	10	—	—	125	—	—	10,5	LPF11	MS2217	—	FH2
3617726	PCLCL1010K-09F	10	10	2	2,5	125	16	16	10,0	LPF13	MS2217	—	FH2
3617728	PCLCL1212M-09F	12	12	—	—	150	—	—	12,5	LPF13	MS2217	—	FH2
3617730	PCLCL1616M-09F	16	16	—	—	150	—	—	16,5	LPF17	MS2217	—	FH2

External/Copying Toolholders (DC.. style inserts)



■ PDJC

order number	catalog number	H=H1	B	B3	H3	L1	L2	L3	F	pin	screw	clamp	wrench
right hand													
3617686	PDJCR0810K-07F	8	125	2	—	125	19,0	—	10,5	LPF11	MS2218	—	FH2
3617688	PDJCR1010K-07F	10	125	—	—	125	—	—	10,5	LPF11	MS2218	—	FH2
3617692	PDJCR1010K-11F	10	125	2	2,5	125	20,0	20	10,5	LPF13	MS2218	—	FH2
3617714	PDJCR1212M-11F	12	150	—	—	125	—	—	12,5	LPF13	MS2218	—	FH2
3617716	PDJCR1616M-11F	16	150	—	—	125	—	—	16,5	LPF17	MS2218	—	FH2
left hand													
3617687	PDJCL0810K-07F	8	125	2	—	125	19,0	—	10,5	LPF11	MS2217	—	FH2
3617689	PDJCL1010K-07F	10	125	—	—	125	—	—	10,5	LPF11	MS2217	—	FH2
3617713	PDJCL1010K-11F	10	125	2	2,5	125	20,0	20	10,5	LPF13	MS2217	—	FH2
3617715	PDJCL1212M-11F	12	150	—	—	150	—	—	12,5	LPF13	MS2217	—	FH2
3617717	PDJCL1616M-11F	16	150	—	—	150	—	—	16,5	LPF17	MS2217	—	FH2

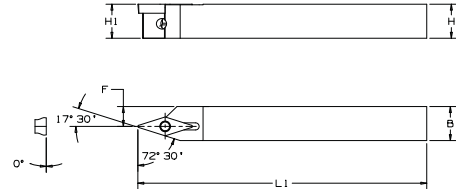


■ PDNC

order number	catalog number	H=H1	B	B3	H3	L1	L2	L3	F	pin	screw	clamp	wrench
right hand													
3617718	PDNCR1010K-11F	10	10	2	3,5	125	25	25	4,5	LPF13	MS2218	—	FH2
3617719	PDNCR1212M-11F	12	12	—	—	150	—	—	7,0	LPF13	MS2218	—	FH2
3617720	PDNCR1616M-11F	16	16	—	—	150	—	—	11,0	LPF17	MS2218	—	FH2

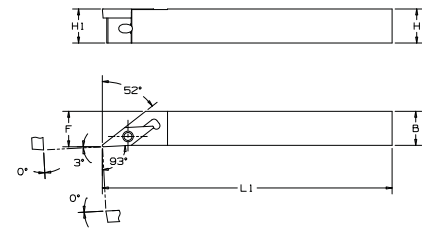
OD Toolholders, continued

External/Copying Toolholders (VB../VP.. style inserts)



■ PVVB

order number	catalog number	H1	B	L1	F	pin	screw	clamp	wrench
right hand									
3617731	PVVBR1010K-11F	10	10	125	5,0	LPF11	MS2218	—	FH2
3617732	PVVBR1212M-11F	12	10	125	7,0	LPF1113	MS2218	—	FH2
3617733	PVVBR1616M-11F	16	12	150	11,0	LPF1117	MS2218	—	FH2



■ PVJB

order number	catalog number	H=H1	B	L1	F	pin	screw	clamp	wrench
right hand									
3617734	PVJBR1010K-11F	10	10	125	10,5	LPF11	MS2218	—	FH2
3617736	PVJBR1212M-11F	12	12	150	12,5	LPF1113	MS2218	—	FH2
3617738	PVJBR1616M-11F	16	16	150	16,5	LPF1117	MS2218	—	FH2
left hand									
3617735	PVJBL1010K-11F	10	10	125	10,5	LPF11	MS2217	—	FH2
3617737	PVJBL1212M-11F	12	12	150	12,5	LPF1113	MS2217	—	FH2
3617739	PVJBL1616M-11F	16	16	150	16,5	LPF1117	MS2217	—	FH2

For more information or to place an order, please contact your Kennametal Representative or Authorized Kennametal Distributor, or visit www.kennametal.com.

OD Tooling

KENNAMETAL ONLINE

www.kennametal.com for:

- online buying
- contract ordering
- order status
- account status
- check price and availability
- favorites list

APPLICATION SUPPORT

Tech Line

USA and Canada:

800.835.3668

Outside USA and Canada:

724.539.6921

Monday-Friday: 7am-7pm

Saturday: 9am-3pm

MACHINE UTILIZATION

Optimize your machine through:

- quick-change tooling
- tool kit assembly
- tool pre-gauging
- advanced cutting tool materials
- tool location management
- tool sensors

KENNAMETAL KNOWLEDGE CENTER

To enroll in our unique, five-day application engineering course, call **724.539.5000**.

TOOL MANAGEMENT SYSTEM

ToolBoss...to reduce your tool-buying, tool-inventory, and tool-supply costs.



To learn more about Kennametal's complete offering of small-parts tooling solutions, please contact your Kennametal Representative or Authorized Kennametal Distributor and request one of our latest brochures, or visit www.kennametal.com to download these brochures in PDF format.

© Copyright 2008 by Kennametal Inc., Latrobe, PA 15650. All rights reserved.
Printed in USA. A07-297

KENNAMETAL®
Engineering Your Competitive Edge

Kennametal, Inc.
Metalworking Solutions & Services Group
1600 Technology Way
Latrobe, PA 15650

➤ DISTRIBUTED BY: