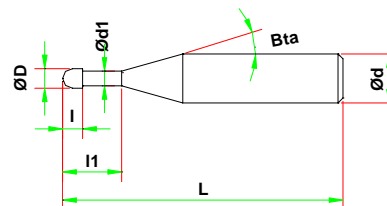


Size Dia 0.1 - 6.0 mm
Flutes 2



HLB



For outstanding heat resistance and lubrication ability on hard milling up to 65 HRC

Oil mist / Airblow coolant recommended

Applicable Work Materials

(MS = Most Suitable S = Suitable)

Work Materials										
Carbon steels	Alloy Steels	Prehardened steels	Hardened steels			Cast Iron	Aluminium Alloy	Graphite	Copper	Plastic
			55HRC	60HRC	65HRC					
S	S	MS	MS	MS	MS				S	

units = mm

Union Tool Part Number	Diameter	Effective Length	Flute Length	Neck Diameter	Shank Taper Angle	Overall Length	Shank Dia	Price £stl	Price Euro
	D	I ₁	I	d ₁	Bta	L	d		
HLB 1001-002	0.1	-	0.2	-	11°	45	4		
HLB 2002-003	0.2	0.3	0.16	0.17	16°	45	4		
HLB 2002-005		0.5							
HLB 2002-0075		0.75							
HLB 2002-010		1.0							
HLB 2002-0125		1.25							
HLB 2002-015		1.5							
HLB 2002-0175		1.75							
HLB 2002-020		2.0							
HLB 2002-025		2.5							
HLB 2002-030		3.0							
HLB 2003-005	0.3	0.5	0.24	0.27	16°	45	4		
HLB 2003-0075		0.75							
HLB 2003-010		1.0							
HLB 2003-0125		1.25							
HLB 2003-015		1.5							
HLB 2003-0175		1.75							
HLB 2003-020		2.0							
HLB 2003-0225		2.25							
HLB 2003-025		2.5							
HLB 2003-0275		2.75							
HLB 2003-030		3.0							
HLB 2003-035		3.5							
HLB 2003-040		4							
HLB 2003-045		4.5							
HLB 2004-005		0.4						0.5	0.32
HLB 2004-0075	0.75								
HLB 2004-010	1.0								
HLB 2004-015	1.5								
HLB 2004-020	2.0								
HLB 2004-025	2.5								
HLB 2004-030	3.0								
HLB 2004-035	3.5								
HLB 2004-040	4.0								
HLB 2004-045	4.5								
HLB 2004-050	5.0								

Union Tool Part Number	Diameter	Effective Length	Flute Length	Neck Diameter	Shank Taper Angle	Overall Length	Shank Dia	Price £stl	Price Euro
	D	l₁	l	d₁	Bta	L	d		
HLB 2004-055	0.4	5.5	0.32	0.37	16°	45	4		
HLB 2004-060		6.0							
HLB 2005-010	0.5	1.0	0.4	0.47	16°	45	4		
HLB 2005-015		1.5							
HLB 2005-020		2.0							
HLB 2005-025		2.5							
HLB 2005-030		3.0							
HLB 2005-035		3.5							
HLB 2005-040		4.0							
HLB 2005-045		4.5							
HLB 2005-050		5.0							
HLB 2005-055		5.5							
HLB 2005-060		6.0							
HLB 2005-070		7.0							
HLB 2005-080		8.0							
HLB 2005-090		9.0							
HLB 2005-100	10.0			50					
HLB 2006-010	0.6	1.0	0.48	0.57	16°	45	4		
HLB 2006-015		1.5							
HLB 2006-020		2.0							
HLB 2006-025		2.5							
HLB 2006-030		3.0							
HLB 2006-035		3.5							
HLB 2006-040		4.0							
HLB 2006-045		4.5							
HLB 2006-050		5.0							
HLB 2006-055		5.5							
HLB 2006-060		6.0							
HLB 2006-065		6.5							
HLB 2006-070		7.0							
HLB 2006-075		7.5							
HLB 2006-080		8.0							
HLB 2006-085		8.5							
HLB 2006-090		9.0							
HLB 2006-095		9.5							
HLB 2006-100	10.0			50					
HLB 2006-110	11.0								
HLB 2006-120	12.0								
HLB 2008-020	0.8	2.0	0.64	0.77	16°	45	4		
HLB 2008-030		3.0							
HLB 2008-040		4.0							
HLB 2008-050		5.0							
HLB 2008-060		6.0							
HLB 2008-070		7.0							
HLB 2008-080		8.0							
HLB 2008-090		9.0							
HLB 2008-100	10.0			50					
HLB 2010-025	1.0	2.5	0.8	0.96	16°	45	4		
HLB 2010-030		3.0							
HLB 2010-040		4.0							
HLB 2010-050		5.0							

Union Tool Part Number	Diameter	Effective Length	Flute Length	Neck Diameter	Shank Taper Angle	Overall Length	Shank Dia	Price £stl	Price Euro
	D	l₁	l	d₁	Bta	L	d		
HLB 2010-060	1.0	6.0	0.8	0.96	16°	45	4		
HLB 2010-070		7.0							
HLB 2010-080		8.0							
HLB 2010-090		9.0							
HLB 2010-100		10.0							
HLB 2010-120		12.0							
HLB 2010-140		14.0							
HLB 2010-160		16.0							
HLB 2010-180		18.0							
HLB 2010-200		20.0							
HLB 2012-060	1.2	6.0	0.96	1.16	16°	45	4		
HLB 2012-080		8.0							
HLB 2012-100		10.0							
HLB 2012-120		12.0							
HLB 2012-140		14.0							
HLB 2012-160		16.0							
HLB 2012-180		18.0							
HLB 2012-200		20.0							
HLB 2014-080	1.4	8.0	1.12	1.34	16°	45	4		
HLB 2014-120		12.0							
HLB 2014-160		16.0							
HLB 2015-030	1.5	3.0	1.2	1.44	16°	45	4		
HLB 2015-040		4.0							
HLB 2015-060		6.0							
HLB 2015-080		8.0							
HLB 2015-100		10.0							
HLB 2015-120		12.0							
HLB 2015-140		14.0							
HLB 2015-160		16.0							
HLB 2015-180		18.0							
HLB 2015-200		20.0							
HLB 2015-220		22.0							
HLB 2016-080	1.6	8.0	1.28	1.54	16°	45	4		
HLB 2016-120		12.0							
HLB 2016-160		16.0							
HLB 2016-200		20.0							
HLB 2018-080	1.8	8.0	1.44	1.74	16°	45	4		
HLB 2018-120		12.0							
HLB 2018-160		16.0							
HLB 2018-200		20.0							
HLB 2020-030	2.0	3.0	1.6	1.94	16°	45	4		
HLB 2020-040		4.0							
HLB 2020-060		6.0							
HLB 2020-080		8.0							
HLB 2020-100		10.0							
HLB 2020-120		12.0							
HLB 2020-140		14.0							
HLB 2020-160		16.0							
HLB 2020-180		18.0							
HLB 2020-200		20.0							
HLB 2020-220		22.0							

Union Tool Part Number	Diameter	Effective Length	Flute Length	Neck Diameter	Shank Taper Angle	Overall Length	Shank Dia	Price £stl	Price Euro
	D	l₁	l	d₁	Bta	L	d		
HLB 2020-250	2.0	25.0	1.6	1.94	16°	65	4		
HLB 2020-300		30.0				70			
HLB 2020-350		35.0				80			
HLB 2020-400		40.0							
HLB 2025-100	2.5	10.0	2.0	2.41	16°	45	4		
HLB 2025-150		15.0				50			
HLB 2025-200		20.0				55			
HLB 2025-250		25.0				60			
HLB 2025-300		30.0				65			
HLB 2030-060-3	3.0	6.0	2.4	2.91	16°	60	3		
HLB 2030-060-4							4		
HLB 2030-060		6					8.0		
HLB 2030-080							10.0		
HLB 2030-100							12.0		
HLB 2030-120							14.0		
HLB 2030-140							16.0		
HLB 2030-160							20.0		
HLB 2030-200							25.0		
HLB 2030-250							30.0		
HLB 2030-300							35.0		
HLB 2030-350							40.0		
HLB 2030-400									
HLB 2040-080-4							4.0	8.0	3.2
HLB 2040-080	6	10.0							
HLB 2040-100		12.0							
HLB 2040-120		14.0							
HLB 2040-140		16.0							
HLB 2040-160		20.0							
HLB 2040-200		25.0							
HLB 2040-300		30.0							
HLB 2040-350		35.0							
HLB 2040-400		40.0							
HLB 2040-450		45.0							
HLB 2040-500		50.0							
HLB 2050-100		5.0	10.0	4	4.91	16°		70	
HLB 2050-200	20.0								
HLB 2050-250	25.0								
HLB 2050-300	30.0								
HLB 2050-350	35.0								
HLB 2060-100	6.0	10.0	4.8	5.91	16°	80	6		
HLB 2060-300		30.0							
HLB 2060-500		50.0							

Super Excellent Series R+/- 0.003 mm on next page