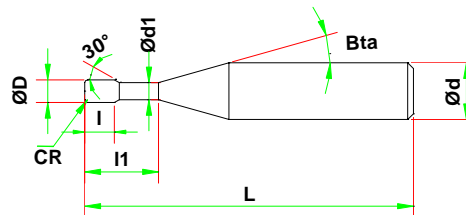




Size Dia 0.4 - 6.0 mm

Flutes 2

HLRS



Standard Series - Diameter Tolerance 0/-0.015, Corner Radius Tolerance ±0.01

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	S	S			S	

2 flutes and 30° helix angle

units = mm

Union Tool Part Number	Diameter	Corner Radius	Effective Length	Flute Length	Overall Length	Shank Diameter	Price	
	D	CR	I ₁	I	L	d		
HLRS 2004-01-010	0.4	0.1	1	0.4	50	4		
HLRS 2004-01-015			1.5					
HLRS 2004-01-020			2					
HLRS 2004-01-030			3					
HLRS 2004-01-040			4					
HLRS 2005-01-010	0.5	0.1	1	0.5	50	4		
HLRS 2005-01-020			2					
HLRS 2005-01-030			3					
HLRS 2005-01-040			4					
HLRS 2005-01-050			5					
HLRS 2005-01-060			6					
HLRS 2006-01-020	0.6	0.1	2	0.6	50	4		
HLRS 2006-01-030			3					
HLRS 2006-01-040			4					
HLRS 2006-01-060			6					
HLRS 2006-01-080			8					
HLRS 2007-01-040	0.7	0.1	4	0.7	50	4		
HLRS 2007-01-060			6					
HLRS 2008-01-040	0.8	0.1	4	0.8	50	4		
HLRS 2008-01-060			6					
HLRS 2008-02-040		0.2	4					
HLRS 2008-02-060			6					
HLRS 2010-01-020	1.0	0.1	2	1.0	50	4		
HLRS 2010-01-040			4					
HLRS 2010-01-060			6					
HLRS 2010-01-080			8					
HLRS 2010-01-100			10					
HLRS 2010-01-120			12					
HLRS 2010-01-160			16					
HLRS 2010-01-200			20					
HLRS 2010-02-020			0.2		2		1.0	50

Union Tool Part Number	Diameter	Corner Radius	Effective Length	Flute Length	Overall Length	Shank Diameter	Price		
	D	CR	l₁	l	L	d			
HLRS 2010-02-040	1.0	0.2	4	1.0	50	4			
HLRS 2010-02-060			6				55		
HLRS 2010-02-080			8						
HLRS 2010-02-100			10						
HLRS 2010-02-120			12		60				
HLRS 2010-02-160			16						
HLRS 2010-02-200			20						
HLRS 2010-03-020		0.3		2	1.0	50	4		
HLRS 2010-03-040				4				55	
HLRS 2010-03-060				6					
HLRS 2010-03-080				8					
HLRS 2010-03-100				10				60	
HLRS 2010-03-120				12					
HLRS 2010-03-160				16					
HLRS 2010-03-200	20								
HLRS 2012-02-060	1.2	0.2	6	1.2	50	4			
HLRS 2012-02-120			12		55				
HLRS 2012-02-200			20		60				
HLRS 2012-03-060		0.3			6	50	4		
HLRS 2012-03-120					12	55			
HLRS 2012-03-200					20	60			
HLRS 2015-02-040	1.5	0.2	4	1.5	50	4			
HLRS 2015-02-060			6				55		
HLRS 2015-02-080			8						
HLRS 2015-02-100			10		60				
HLRS 2015-02-120			12						
HLRS 2015-02-160			16						
HLRS 2015-02-200		20							
HLRS 2015-03-040		0.3		4	1.5	50	4		
HLRS 2015-03-060				6				55	
HLRS 2015-03-080				8					
HLRS 2015-03-100				10		60			
HLRS 2015-03-120				12					
HLRS 2015-03-160				16					
HLRS 2015-03-200		20							
HLRS 2015-05-040		0.5		4	1.5	50	4		
HLRS 2015-05-060				6				55	
HLRS 2015-05-080				8					
HLRS 2015-05-100				10		60			
HLRS 2015-05-120	12								
HLRS 2015-05-160	16								
HLRS 2015-05-200	20								
HLRS 2020-01-040	2.0	0.1	4	2.0	50	4			
HLRS 2020-01-060			6				55		
HLRS 2020-01-080			8						
HLRS 2020-01-100			10		60				
HLRS 2020-01-120			12						
HLRS 2020-01-160			16						

Union Tool Part Number	Diameter	Corner Radius	Effective Length	Flute Length	Overall Length	Shank Diameter	Price						
	D	CR	l₁	l	L	d							
HLRS 2020-01-200	2.0	0.1	20	2.0	60	4							
HLRS 2020-01-260			26		70								
HLRS 2020-02-040		0.2	2.0	4	2.0	50	4						
HLRS 2020-02-060				6									
HLRS 2020-02-080				8									
HLRS 2020-02-100				10									
HLRS 2020-02-120				12				55					
HLRS 2020-02-160				16				60					
HLRS 2020-02-200				20									
HLRS 2020-02-260				26				70					
HLRS 2020-03-040				0.3				2.0	4	2.0	50	4	
HLRS 2020-03-060									6				
HLRS 2020-03-080		8											
HLRS 2020-03-100		10											
HLRS 2020-03-120		12	55										
HLRS 2020-03-160		16	60										
HLRS 2020-03-200		20											
HLRS 2020-03-260		26	70										
HLRS 2020-05-040		0.5	2.0	4	2.0	50	4						
HLRS 2020-05-060				6									
HLRS 2020-05-080				8									
HLRS 2020-05-100				10									
HLRS 2020-05-120				12				55					
HLRS 2020-05-160				16				60					
HLRS 2020-05-200				20									
HLRS 2020-05-260				26				70					
HLRS 2025-03-100		2.5	0.3	10	2.5	50	4						
HLRS 2025-03-200				20		60							
HLRS 2025-03-300				30		70							
HLRS 2025-05-100			0.5	2.5	10	50	4						
HLRS 2025-05-200	20				60								
HLRS 2025-05-300	30				70								
HLRS 2030-01-060	3.0	0.1	6	3.0	55	6							
HLRS 2030-01-160			16		60								
HLRS 2030-01-260			26		70								
HLRS 2030-01-360			36		80								
HLRS 2030-02-060		0.2	3.0	6	3.0	55	6						
HLRS 2030-02-160				16		60							
HLRS 2030-02-260				26		70							
HLRS 2030-02-360				36		80							
HLRS 2030-03-060		0.3	3.0	6	3.0	55	6						
HLRS 2030-03-160				16		60							
HLRS 2030-03-260				26		70							
HLRS 2030-03-360				36		80							
HLRS 2030-05-060		0.5	3.0	6	3.0	55	6						
HLRS 2030-05-160				16		60							
HLRS 2030-05-260				26		70							

Union Tool Part Number	Diameter	Corner Radius	Effective Length	Flute Length	Overall Length	Shank Diameter	Price
	D	CR	l₁	l	L	d	
HLRS 2030-05-360	3.0	0.5	36	3.0	80	6	
HLRS 2030-10-060		1	6	3.0	55	6	
HLRS 2030-10-160			16		60		
HLRS 2030-10-260			26		70		
HLRS 2030-10-360			36		80		
HLRS 2040-01-080	4.0	0.1	8	4.0	65	6	
HLRS 2040-01-200			20		65		
HLRS 2040-01-320			32		80		
HLRS 2040-01-480			48		100		
HLRS 2040-02-080		0.2	8	4.0	65	6	
HLRS 2040-02-200			20		65		
HLRS 2040-02-320			32		80		
HLRS 2040-02-480			48		100		
HLRS 2040-03-080		0.3	8	4.0	65	6	
HLRS 2040-03-200			20		65		
HLRS 2040-03-320			32		80		
HLRS 2040-03-480			48		100		
HLRS 2040-05-080		0.5	8	4.0	65	6	
HLRS 2040-05-200			20		65		
HLRS 2040-05-320			32		80		
HLRS 2040-05-480			48		100		
HLRS 2040-10-080		1	8	4.0	65	6	
HLRS 2040-10-200			20		65		
HLRS 2040-10-320			32		80		
HLRS 2040-10-480			48		100		
HLRS 2050-02-200	5.0	0.2	20	5.0	70	6	
HLRS 2050-02-400			40		90		
HLRS 2050-03-200		0.3	20	5.0	70	6	
HLRS 2050-03-400			40		90		
HLRS 2050-05-200		0.5	20	5.0	70	6	
HLRS 2050-05-400			40		90		
HLRS 2050-10-200		1	20	5.0	70	6	
HLRS 2050-10-400			40		90		
HLRS 2060-01-120	6.0	0.1	12	6.0	65	6	
HLRS 2060-01-300			30		100		
HLRS 2060-01-600			60		120		
HLRS 2060-02-120		0.2	12	6.0	65	6	
HLRS 2060-02-300			30		100		
HLRS 2060-02-600			60		120		
HLRS 2060-03-120		0.3	12	6.0	65	6	
HLRS 2060-03-300			30		100		
HLRS 2060-03-600			60		120		
HLRS 2060-05-120		0.5	12	6.0	65	6	
HLRS 2060-05-300			30		100		
HLRS 2060-05-600			60		120		
HLRS 2060-10-120		1	12	6.0	65	6	
HLRS 2060-10-300			30		100		
HLRS 2060-10-600			60		120		