



HAIMER®
Quality Wins.



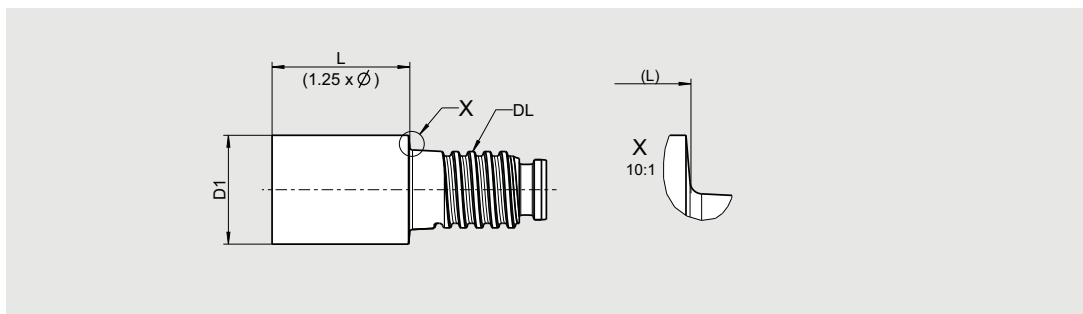
M A S T E R C A T A L O G

HAIMER®

TOOLING TECHNOLOGY METRIC / INCH

DUO-LOCK® BLANK
WITHOUT WRENCH FLATS

METRIC

**Version: short, without wrench flats**

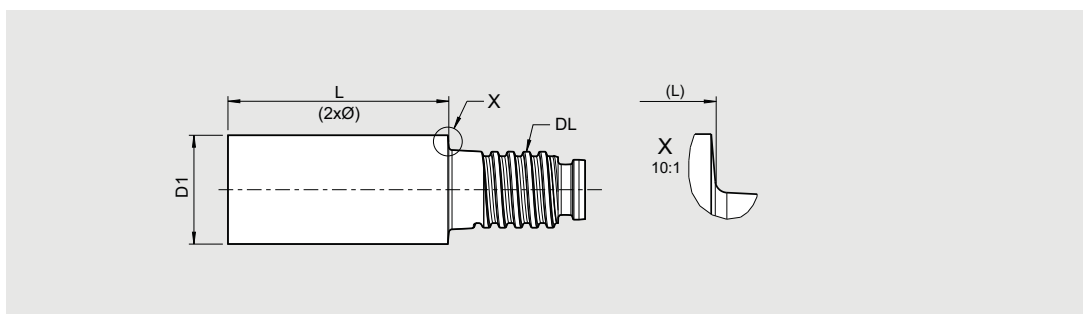
- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request

Pay attention to wrench flats overview

Use only with Duo-Lock Torque Master

Keep minimum length to plain surface (See page 223)

Article-Code	D1 (h6) [mm]	L (+ 1) [mm]	Interface	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0125-0001	10	12.5	DL10	20	8	HF10
RODL12-D12HA0150-0001	12	15	DL12	30	9.5	HF10
RODL16-D16HA0200-0001	16	20	DL16	60	13	HF10
RODL20-D20HA0250-0001	20	25	DL20	80	16	HF10
RODL25-D25HA0313-0001	25	31.25	DL25	100	21	HF10
RODL32-D32HA0400-0001	32	40	DL32	130	28	HF10

**Version: normal, without wrench flats**

- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices upon request

Pay attention to wrench flats overview

Use only with Duo-Lock Torque Master

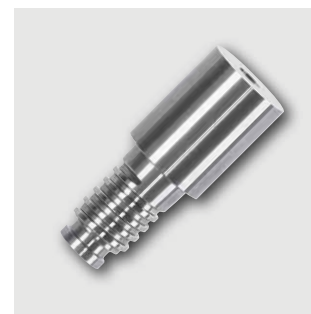
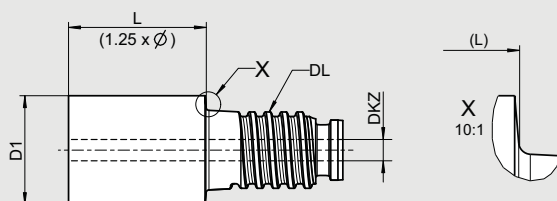
Keep minimum length to plain surface (See page 223)

Article-Code	D1 (h6) [mm]	L (+ 1) [mm]	Interface	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0200-0001	10	20	DL10	20	8	HF10
RODL12-D12HA0240-0001	12	24	DL12	30	9.5	HF10
RODL16-D16HA0320-0001	16	32	DL16	60	13	HF10
RODL20-D20HA0400-0001	20	40	DL20	80	16	HF10
RODL25-D25HA0500-0001	25	50	DL25	100	21	HF10
RODL32-D32HA0640-0001	32	64	DL32	130	28	HF10

Further lengths available on request

METRIC

DUO-LOCK® BLANK COOLING BORE CENTRAL – WITHOUT WRENCH FLATS



Version: short, without wrench flats

- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling

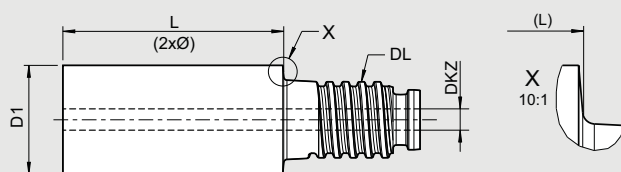
Pay attention to wrench flats overview

Use only with Duo-Lock Torque Master

Keep minimum length to plain surface (See page 223)

Article-Code	D1 (h6) [mm]	L (+ 1) [mm]	Interface	DKZ [mm]	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0125-0001KZ	10	12.5	DL10	2	20	8	HF10
RODL12-D12HA0150-0001KZ	12	15	DL12	2	30	9.5	HF10
RODL16-D16HA0200-0001KZ	16	20	DL16	2	60	13	HF10
RODL20-D20HA0250-0001KZ	20	25	DL20	3	80	16	HF10
RODL25-D25HA0313-0001KZ	25	31.25	DL25	4	100	21	HF10
RODL32-D32HA0400-0001KZ	32	40	DL32	5	130	28	HF10

Further lengths available on request - Radial cooling available on request



Version: normal, without wrench flats

- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices upon request
- Central cooling

Pay attention to wrench flats overview

Use only with Duo-Lock Torque Master

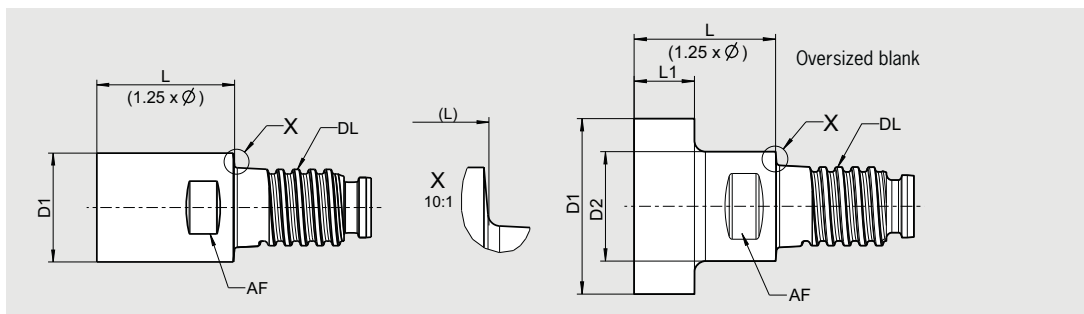
Keep minimum length to plain surface (See page 223)

Article-Code	D1 (h6) [mm]	L (+ 1) [mm]	Interface	DKZ [mm]	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0200-0001KZ	10	20	DL10	2	20	8	HF10
RODL12-D12HA0240-0001KZ	12	24	DL12	2	30	9.5	HF10
RODL16-D16HA0320-0001KZ	16	32	DL16	2	60	13	HF10
RODL20-D20HA0400-0001KZ	20	40	DL20	3	80	16	HF10
RODL25-D25HA0500-0001KZ	25	50	DL25	4	100	21	HF10
RODL32-D32HA0640-0001KZ	32	64	DL32	5	130	28	HF10

Further lengths available on request - Radial cooling available on request

DUO-LOCK® BLANK
SHORT – WITH WRENCH FLATS

METRIC

**Version: short, with wrench flats**

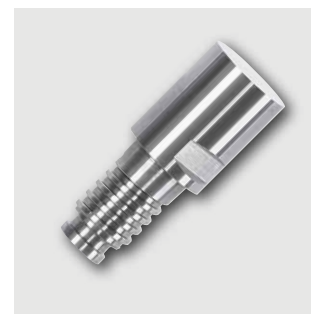
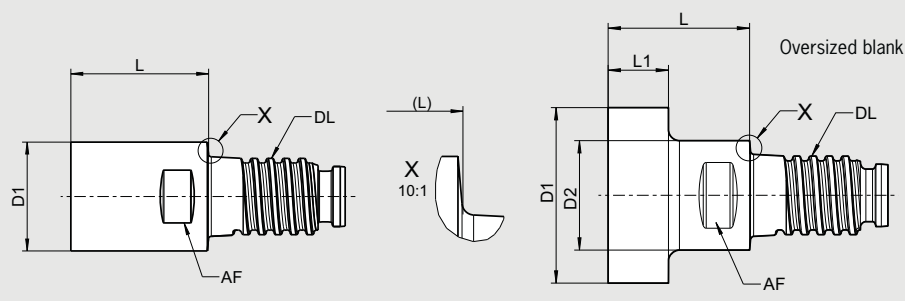
- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling available upon request

Article-Code	D1 (h6) [mm]	D2 (-0.1) [mm]	L (+ 1) [mm]	L1 (+ 1) [mm]	Interface	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0125-0002	10	–	12.5	–	DL10	20	8	HF10
RODL10-D12HA0125-0002	12	9.60	12.5	5.0	DL10	20	8	HF10
RODL10-D1270HA0125-0002	12.7	9.60	12.5	5	DL10	20	8	HF10
RODL10-D16HA0125-0002	16	9.60	12.5	5.0	DL10	20	8	HF10
RODL10-D20HA0125-0002	20	9.60	12.5	5.0	DL10	20	8	HF10
RODL12-D12HA0150-0002	12	–	15	–	DL12	30	9.5	HF10
RODL12-D1270HA0150-0002	12.7	–	15	–	DL12	30	9.5	HF10
RODL12-D16HA0150-0002	16	11.50	15	6.0	DL12	30	9.5	HF10
RODL12-D18HA0150-0002	18	11.50	15	6.0	DL12	30	9.5	HF10
RODL12-D20HA0150-0002	20	11.50	15	6.0	DL12	30	9.5	HF10
RODL12-D25HA0150-0002	25	11.50	15	6.0	DL12	30	9.5	HF10
RODL12-D2540HA0150-0002	25.4	11.50	15	6	DL12	30	9.5	HF10
RODL16-D16HA0200-0002	16	–	20	–	DL16	60	13	HF10
RODL16-D18HA0200-0002	18	15.50	20	8.0	DL16	60	13	HF10
RODL16-D20HA0200-0002	20	15.50	20	8.0	DL16	60	13	HF10
RODL16-D25HA0200-0002	25	15.50	20	8.0	DL16	60	13	HF10
RODL16-D2540HA0200-0002	25.4	15.50	20	8	DL16	60	13	HF10
RODL16-D32HA0200-0002	32	15.50	20	8.0	DL16	60	13	HF10
RODL20-D20HA0250-0002	20	–	25	–	DL20	80	16	HF10
RODL20-D25HA0250-0002	25	19.30	25	10.0	DL20	80	16	HF10
RODL20-D2540HA0250-0002	25.4	19.30	25	10	DL20	80	16	HF10
RODL20-D32HA0250-0002	32	19.30	25	10.0	DL20	80	16	HF10
RODL20-D36HA0250-0002	36	19.30	25	10.0	DL20	80	16	HF10
RODL20-D40HA0250-0002	40	19.30	25	10.0	DL20	80	16	HF10
RODL25-D25HA0313-0002	25	–	31.25	–	DL25	100	21	HF10
RODL25-D2540HA0313-0002	25.4	–	31.25	–	DL25	100	21	HF10
RODL32-D32HA0400-0002	32	–	40	–	DL32	130	28	HF10

Further lengths available on request

INCH

DUO-LOCK® BLANK SHORT – WITH WRENCH FLATS



Version: short, with wrench flats

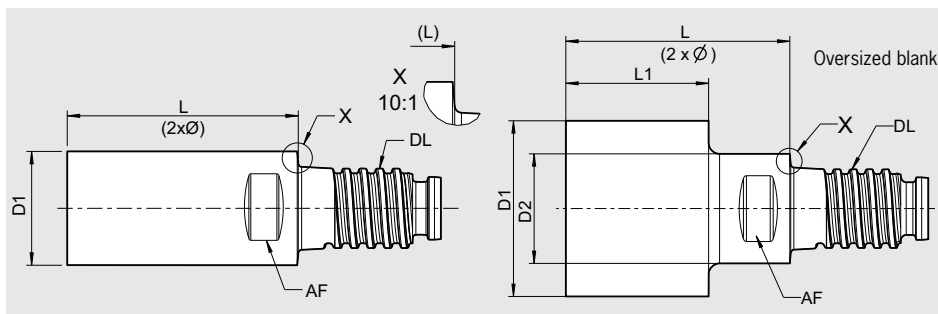
- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling available upon request

Article-Code	D1 (h6) [inch]	D2 (-0.004) [inch]	L (+ 0.04) [inch]	L1 (+ 0.04) [inch]	Interface	Tightening torque [Nm]	AF [inch]	Material
RODL10-D10HA0125-0002	0.394	–	0.492	–	DL10	20	0.315	HF10
RODL10-D12HA0125-0002	0.472	0.378	0.492	0.197	DL10	20	0.315	HF10
RODL10-D1270HA0125-0002	0.500	0.378	0.492	0.197	DL10	20	0.315	HF10
RODL10-D16HA0125-0002	0.630	0.378	0.492	0.197	DL10	20	0.315	HF10
RODL10-D20HA0125-0002	0.394	0.378	0.492	0.197	DL10	20	0.315	HF10
RODL12-D12HA0150-0002	0.472	–	0.590	–	DL12	30	0.374	HF10
RODL12-D1270HA0150-0002	0.500	–	0.590	–	DL12	30	0.374	HF10
RODL12-D16HA0150-0002	0.630	0.453	0.590	0.236	DL12	30	0.374	HF10
RODL12-D18HA0150-0002	0.709	0.453	0.590	0.236	DL12	30	0.374	HF10
RODL12-D20HA0150-0002	0.787	0.453	0.590	0.236	DL12	30	0.374	HF10
RODL12-D25HA0150-0002	0.984	0.453	0.590	0.236	DL12	30	0.374	HF10
RODL12-D2540HA0150-0002	1.000	0.453	0.590	0.236	DL12	30	0.374	HF10
RODL16-D16HA0200-0002	0.630	–	0.787	–	DL16	60	0.512	HF10
RODL16-D18HA0200-0002	0.709	0.610	0.787	0.315	DL16	60	0.512	HF10
RODL16-D20HA0200-0002	0.787	0.610	0.787	0.315	DL16	60	0.512	HF10
RODL16-D25HA0200-0002	0.984	0.610	0.787	0.315	DL16	60	0.512	HF10
RODL16-D2540HA0200-0002	1.000	0.610	0.787	0.315	DL16	60	0.512	HF10
RODL16-D32HA0200-0002	1.260	0.610	0.787	0.315	DL16	60	0.512	HF10
RODL20-D20HA0250-0002	0.787	–	0.984	–	DL20	80	0.630	HF10
RODL20-D25HA0250-0002	0.984	0.760	0.984	0.394	DL20	80	0.630	HF10
RODL20-D2540HA0250-0002	1.000	0.760	0.984	0.394	DL20	80	0.630	HF10
RODL20-D32HA0250-0002	1.260	0.760	0.984	0.394	DL20	80	0.630	HF10
RODL20-D36HA0250-0002	1.417	0.760	0.984	0.394	DL20	80	0.630	HF10
RODL20-D40HA0250-0002	1.575	0.760	0.984	0.394	DL20	80	0.630	HF10
RODL25-D25HA0313-0002	0.984	–	1.230	–	DL25	100	0.827	HF10
RODL25-D2540HA0313-0002	1.000	–	1.230	–	DL25	100	0.827	HF10
RODL32-D32HA0400-0002	1.260	–	1.575	–	DL32	130	1.102	HF10

Further lengths available on request

DUO-LOCK® BLANK
NORMAL – WITH WRENCH FLATS

METRIC

**Version: normal, with wrench flats**

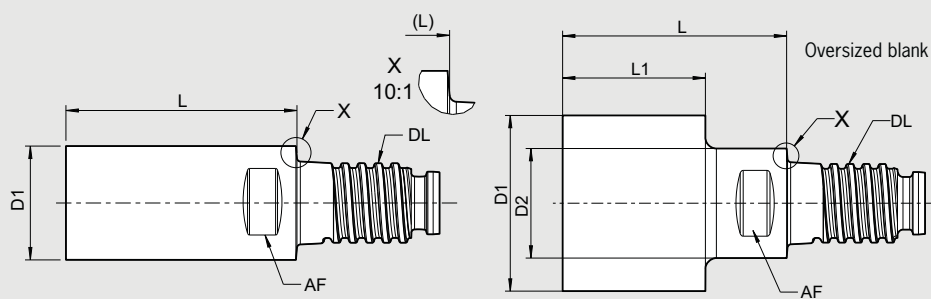
- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling available upon request

Article-Code	D1 (h6) [mm]	D2 (-0.1) [mm]	L (+ 1) [mm]	L1 (+ 1) [mm]	Interface	Tightening torque [Nm]	AF [mm]	Material
RODL10-D06HA0200-0002	6	9.60	20	16.0	DL10	20	8	HF10
RODL10-D0635HA0200-0002	6.4	9.60	20	16.0	DL10	20	8	HF10
RODL10-D08HA0200-0002	8	9.60	20	16.0	DL10	20	8	HF10
RODL10-D10HA0200-0002	10	–	20	–	DL10	20	8	HF10
RODL10-D12HA0200-0002	12	9.60	20	12.5	DL10	20	8	HF10
RODL10-D1270HA0200-0002	12.7	9.60	20	12.5	DL10	20	8	HF10
RODL10-D16HA0200-0002	16	9.60	20	12.5	DL10	20	8	HF10
RODL10-D20HA0200-0002	20	9.60	20	12.5	DL10	20	8	HF10
RODL12-D12HA0240-0002	12	–	24	–	DL12	30	9.5	HF10
RODL12-D1270HA0240-0002	12.7	–	24	–	DL12	30	9.5	HF10
RODL12-D16HA0240-0002	16	11.50	24	15.0	DL12	30	9.5	HF10
RODL12-D18HA0240-0002	18	11.50	24	15.0	DL12	30	9.5	HF10
RODL12-D20HA0240-0002	20	11.50	24	15.0	DL12	30	9.5	HF10
RODL12-D25HA0240-0002	25	11.50	24	15.0	DL12	30	9.5	HF10
RODL12-D2540HA0240-0002	25.4	11.50	24	15.0	DL12	30	9	HF10
RODL16-D16HA0320-0002	16	–	32	–	DL16	60	13	HF10
RODL16-D18HA0320-0002	18	15.50	32	20.0	DL16	60	13	HF10
RODL16-D20HA0320-0002	20	15.50	32	20.0	DL16	60	13	HF10
RODL16-D25HA0320-0002	25	15.50	32	20.0	DL16	60	13	HF10
RODL16-D2540HA0320-0002	25.4	15.50	32	20.0	DL16	60	13	HF10
RODL16-D32HA0320-0002	32	15.50	32	20.0	DL16	60	13	HF10
RODL20-D20HA0400-0002	20	–	40	–	DL20	80	16	HF10
RODL20-D25HA0400-0002	25	19.30	40	25.0	DL20	80	16	HF10
RODL20-D2540HA0400-0002	25.4	19.30	40	25.0	DL20	80	16	HF10
RODL20-D32HA0400-0002	32	19.30	40	25.0	DL20	80	16	HF10
RODL20-D36HA0400-0002	36	19.30	40	25.0	DL20	80	16	HF10
RODL20-D40HA0400-0002	40	19.30	40	25.0	DL20	80	16	HF10
RODL25-D25HA0500-0002	25	–	50	–	DL25	100	21	HF10
RODL25-D2540HA0500-0002	25.4	–	50	–	DL25	100	21	HF10
RODL32-D32HA0640-0002	32	–	64	–	DL32	130	28	HF10

Further lengths available on request

INCH

DUO-LOCK® BLANK NORMAL – WITH WRENCH FLATS



Version: normal, with wrench flats

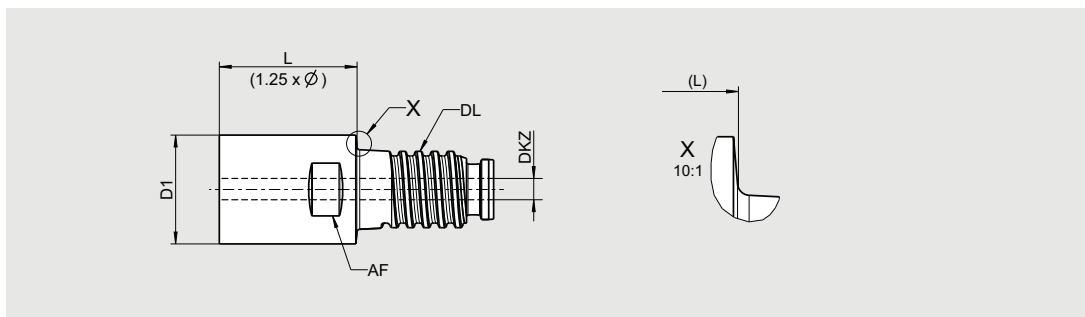
- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling available upon request

Article-Code	D1 (h6) [inch]	D2 (-0.004) [inch]	L (+ 0.04) [inch]	L1 (+ 0.04) [inch]	Interface	Tightening torque [Nm]	AF [inch]	Material
RODL10-D06HA0200-0002	0.236	0.378	0.787	0.630	DL10	20	0.315	HF10
RODL10-D0635HA0200-0002	0.250	0.378	0.787	0.630	DL10	20	0.315	HF10
RODL10-D08HA0200-0002	0.315	0.378	0.787	0.630	DL10	20	0.315	HF10
RODL10-D10HA0200-0002	0.394	–	0.787	–	DL10	20	0.315	HF10
RODL10-D12HA0200-0002	0.472	0.378	0.787	0.492	DL10	20	0.315	HF10
RODL10-D1270HA0200-0002	0.500	0.378	0.787	0.492	DL10	20	0.315	HF10
RODL10-D16HA0200-0002	0.630	0.378	0.787	0.492	DL10	20	0.315	HF10
RODL10-D20HA0200-0002	0.787	0.378	0.787	0.492	DL10	20	0.315	HF10
RODL12-D12HA0240-0002	0.472	–	0.945	–	DL12	30	0.374	HF10
RODL12-D1270HA0240-0002	0.500	–	0.945	–	DL12	30	0.374	HF10
RODL12-D16HA0240-0002	0.630	0.453	0.945	0.591	DL12	30	0.374	HF10
RODL12-D18HA0240-0002	0.709	0.453	0.945	0.591	DL12	30	0.374	HF10
RODL12-D20HA0240-0002	0.787	0.453	0.945	0.591	DL12	30	0.374	HF10
RODL12-D25HA0240-0002	0.984	0.453	0.945	0.591	DL12	30	0.374	HF10
RODL12-D2540HA0240-0002	1.000	0.453	0.945	0.591	DL12	30	0.374	HF10
RODL16-D16HA0320-0002	0.630	–	1.260	–	DL16	60	0.512	HF10
RODL16-D18HA0320-0002	0.709	0.610	1.260	0.787	DL16	60	0.512	HF10
RODL16-D20HA0320-0002	0.787	0.610	1.260	0.787	DL16	60	0.512	HF10
RODL16-D25HA0320-0002	0.984	0.610	1.260	0.787	DL16	60	0.512	HF10
RODL16-D2540HA0320-0002	1.000	0.610	1.260	0.787	DL16	60	0.512	HF10
RODL16-D32HA0320-0002	1.260	0.610	1.260	0.787	DL16	60	0.512	HF10
RODL20-D20HA0400-0002	0.787	–	1.575	–	DL20	80	0.630	HF10
RODL20-D25HA0400-0002	0.984	0.760	1.575	0.984	DL20	80	0.630	HF10
RODL20-D2540HA0400-0002	1.000	0.760	1.575	0.984	DL20	80	0.630	HF10
RODL20-D32HA0400-0002	1.260	0.760	1.575	0.984	DL20	80	0.630	HF10
RODL20-D36HA0400-0002	1.417	0.760	1.575	0.984	DL20	80	0.630	HF10
RODL20-D40HA0400-0002	1.575	0.760	1.575	0.984	DL20	80	0.630	HF10
RODL25-D25HA0500-0002	0.984	–	1.969	–	DL25	100	0.827	HF10
RODL25-D2540HA0500-0002	1.000	–	1.969	–	DL25	100	0.827	HF10
RODL32-D32HA0640-0002	1.260	–	2.520	–	DL32	130	1.102	HF10

Further lengths available on request

DUO-LOCK® BLANK COOLING BORE CENTRAL – WITH WRENCH FLATS

METRIC

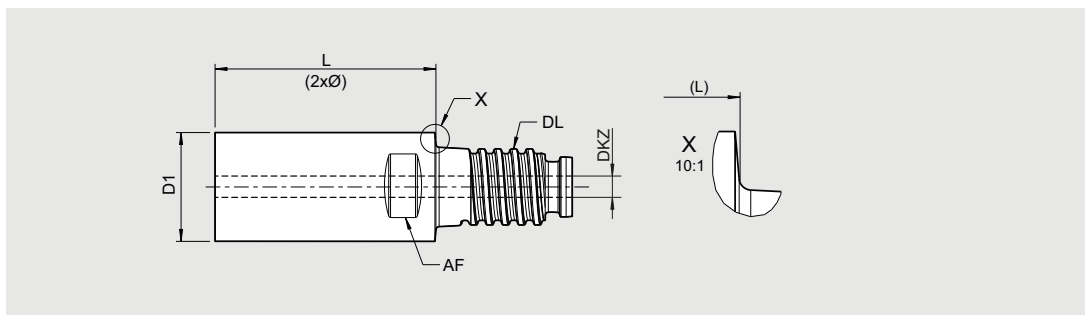


Version: short, with wrench flats

- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling

Article-Code	D1 (h6) [mm]	L (+ 1) [mm]	Interface	DKZ [mm]	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0125-0002KZ	10	12.5	DL10	2	20	8	HF10
RODL12-D12HA0150-0002KZ	12	15	DL12	2	30	9.5	HF10
RODL16-D16HA0200-0002KZ	16	20	DL16	2	60	13	HF10
RODL20-D20HA0250-0002KZ	20	25	DL20	3	80	16	HF10
RODL25-D25HA0313-0002KZ	25	31.25	DL25	4	100	21	HF10
RODL32-D32HA0400-0002KZ	32	40	DL32	5	130	28	HF10

Further lengths available on request - Radial cooling available on request



Version: normal, with wrench flats

- Best length repeatability
- HF10: Fine grain carbide, 10% cobalt
- Measuring devices on request
- Central cooling

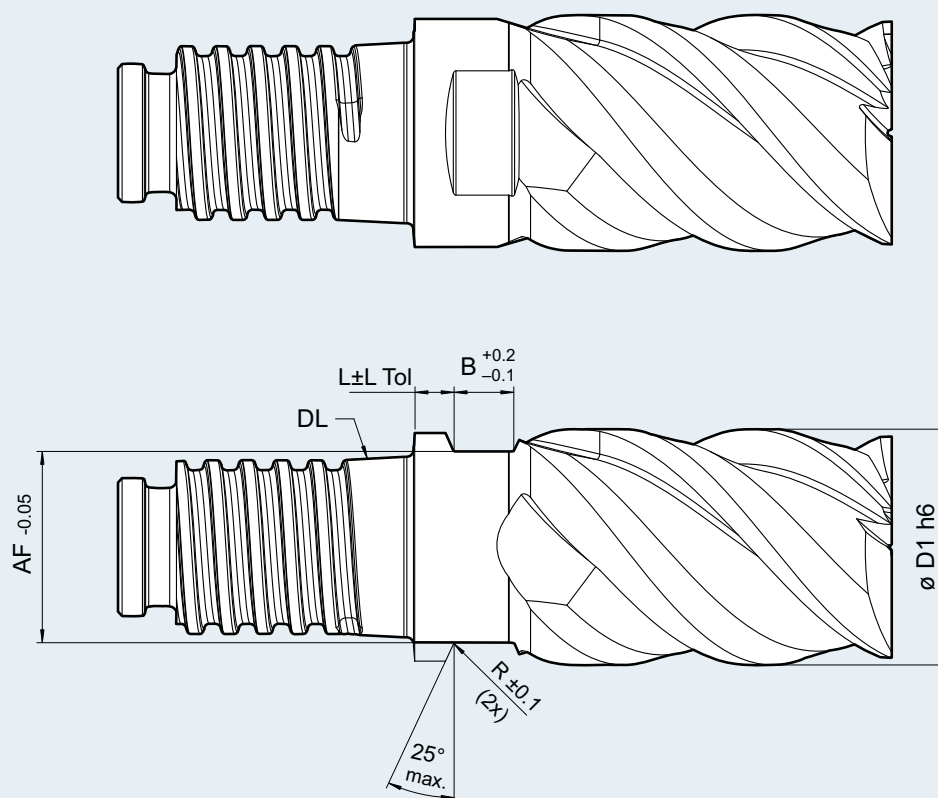
Article-Code	D1 (h6) [mm]	L (+ 1) [mm]	Interface	DKZ [mm]	Tightening torque [Nm]	AF [mm]	Material
RODL10-D10HA0200-0002KZ	10	20	DL10	2	20	8	HF10
RODL12-D12HA0240-0002KZ	12	24	DL12	2	30	9.5	HF10
RODL16-D16HA0320-0002KZ	16	32	DL16	2	60	13	HF10
RODL20-D20HA0400-0002KZ	20	40	DL20	3	80	16	HF10
RODL25-D25HA0500-0002KZ	25	50	DL25	4	100	21	HF10
RODL32-D32HA0640-0002KZ	32	64	DL32	5	130	28	HF10

Further lengths available on request - Radial cooling available on request

METRIC

INCH

DUO-LOCK® BLANK WRENCH FLATS SPECIFICATIONS



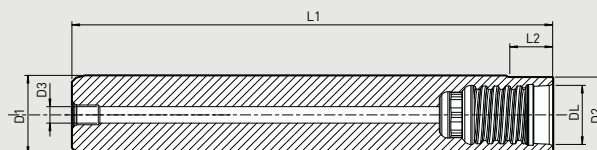
Interface	AF [mm]	L [mm]	L Tol. $\pm$ [mm]	B [mm]	Ø D1 [mm]	R [mm]
DL10	8	1.7	± 0.15	2.5	10	0.3
DL12	9.5	2	± 0.15	3	12	0.3
DL16	13	2.5	± 0.2	4	16	0.3
DL20	16	3.1	± 0.2	4.8	20	0.3
DL25	21	3.5	± 0.2	7	25	0.6
DL32	28	4	± 0.2	9	32	0.6

Interface	AF [inch]	L [inch]	L Tol. $\pm$ [inch]	B [inch]	Ø D1 [inch]	R [inch]
DL10	0.315	0.067	± 0.006	0.098	3/8	0.012
DL12	0.374	0.079	± 0.006	0.118	1/2	0.012
DL16	0.512	0.098	± 0.008	0.157	5/8	0.012
DL20	0.630	0.122	± 0.008	0.189	3/4	0.012
DL25	0.827	0.138	± 0.008	0.276	1	0.024
DL32	1.102	0.157	± 0.008	0.354	1 1/4	0.024

DUO-LOCK® EXTENSIONS
CYLINDRICAL – SHORT – STEEL

METRIC

INCH

**Version: cylindrical, short**

- Shank tolerance: h6
- With inner coolant bore
- Optional with Safe-Lock

– Also available:

Extensions with coating – for perfect shrinking in and out even at high forces during machining

Duo-Lock extensions cylindrical: short

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [mm]	Length L1 [mm]	Neck Ø D2 [mm]	Neck length L2 [mm]	Internal bore Ø D3 [mm]
DL12	75.120.DL12	75.120.DL12.1	12	60	11.5	6	2.5
DL16	75.160.DL16	75.160.DL16.1	16	65	15.5	8	3
DL20	75.200.DL20	75.200.DL20.1	20	70	19.3	10	3
DL25	75.250.DL25	75.250.DL25.1	25	80	24	12.5	5
DL32	75.320.DL32	75.320.DL32.1	32	90	31	16	5

Duo-Lock extensions cylindrical: short with Safe-Lock

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [mm]	Length L1 [mm]	Neck Ø D2 [mm]	Neck length L2 [mm]	Internal bore Ø D3 [mm]
DL10	75.100.DL10	75.100.DL10.1	10	55	9.6	5	2.5
DL12	75.121.DL12	75.121.DL12.1	12	65	11.5	6	2.5
DL16	75.161.DL16	75.161.DL16.1	16	70	15.5	8	3
DL20	75.201.DL20	75.201.DL20.1	20	80	19.3	10	3
DL25	75.251.DL25	75.251.DL25.1	25	90	24	12.5	5
DL32	75.321.DL32	75.321.DL32.1	32	105	31	16	5

Duo-Lock extensions cylindrical: short

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [inch]	Length L1 [inch]	Neck length L2 [inch]	Neck Ø D2 [inch]	Internal bore Ø D3 [inch]
DL16	75.5/8z0.DL16	75.5/8z0.DL16.1	5/8	2.5	0.3125	0.6053	0.1181
DL20	75.3/4z0.DL20	75.3/4z0.DL20.1	3/4	3	0.375	0.7303	0.1181
DL25	75.1z0.DL25	75.1z0.DL25.1	1	3	0.5	0.9606	0.1969
DL32	75.11/4z0.DL32	75.11/4z0.DL32.1	11/4	3.5	0.625	1.2106	0.1969

Duo-Lock extensions cylindrical: short with Safe-Lock

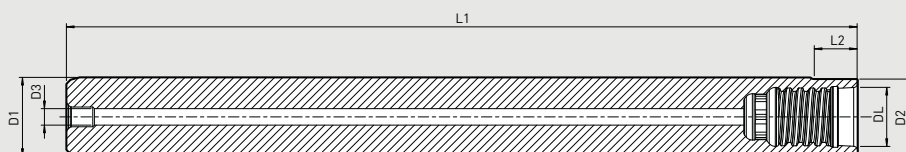
Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [inch]	Length L1 [inch]	Neck length L2 [inch]	Neck Ø D2 [inch]	Internal bore Ø D3 [inch]
DL10	75.3/8z0.DL10	75.3/8z0.DL10.1	3/8	2.25	0.1875	0.3593	0.0984
DL12	75.1/2z0.DL12	75.1/2z0.DL12.1	1/2	2.5	0.25	0.4803	0.0984
DL16	75.5/8z1.DL16	75.5/8z1.DL16.1	5/8	2.75	0.3125	0.6053	0.1181
DL20	75.3/4z1.DL20	75.3/4z1.DL20.1	3/4	3	0.375	0.7303	0.1181
DL25	75.1z1.DL25	75.1z1.DL25.1	1	3.5	0.5	0.9606	0.1969
DL32	75.11/4z1.DL32	75.11/4z1.DL32.1	11/4	4	0.625	1.2106	0.1969

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

METRIC **INCH** **DUO-LOCK® EXTENSIONS**
CYLINDRICAL – LONG – STEEL



Version: cylindrical, long

- Shank tolerance: h6
- With inner coolant bore
- Vibration dampening on request
- Safe-Lock for an extra charge
- Cutting to length possible for an extra charge

– Also available:

Extensions with coating – for perfect shrinking in and out even at high forces during machining

Duo-Lock extensions cylindrical: long

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [mm]	Length L1 [mm]	Neck Ø D2 [mm]	Neck length L2 [mm]	Internal bore Ø D3 [mm]
DL10	75.102.DL10	75.102.DL10.1	10	100	9.6	5	2.5
DL12	75.122.DL12	75.122.DL12.1	12	120	11.5	6	2.5
DL16	75.162.DL16	75.162.DL16.1	16	160	15.5	8	3
DL20	75.202.DL20	75.202.DL20.1	20	200	19.3	10	3
DL25	75.252.DL25	75.252.DL25.1	25	250	24	12.5	5
DL32	75.322.DL32	75.322.DL32.1	32	250	31	16	5

Duo-Lock extensions cylindrical: long

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [inch]	Length L1 [inch]	Neck length L2 [inch]	Neck Ø D2 [inch]	Internal bore Ø D3 [inch]
DL10	75.3/8z2.DL10	75.3/8z2.DL10.1	3/8	3.75	0.1875	0.3593	0.0984
DL12	75.1/2z2.DL12	75.1/2z2.DL12.1	1/2	5	0.25	0.4803	0.0984
DL16	75.5/8z2.DL16	75.5/8z2.DL16.1	5/8	6.25	0.3125	0.6053	0.1181
DL20	75.3/4z2.DL20	75.3/4z2.DL20.1	3/4	7.5	0.375	0.7303	0.1181
DL25	75.1z2.DL25	75.1z2.DL25.1	1	10	0.5	0.9606	0.1969
DL32	75.11/4z2.DL32	75.11/4z2.DL32.1	11/4	10	0.625	1.2106	0.1969

Torque of Duo-Lock interface

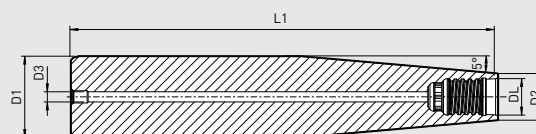
	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

DUO-LOCK® EXTENSIONS
CONICAL – SHORT – STEEL

METRIC

INCH

**Version: conical, short**

- Shank tolerance: h6
- With inner coolant bore
- With Safe-Lock as standard

Also available:

Extensions with coating – for perfect shrinking in and out even at high forces during machining

Duo-Lock extensions conical: short with Safe-Lock

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [mm]	Length L1 [mm]	Outer Ø D2 [mm]	Internal bore Ø D3 [mm]
DL10	75.120.DL10	75.120.DL10.1	12	65	9.6	2.5
DL10	75.160.DL10	75.160.DL10.1	16	90	9.6	2.5
DL10	75.200.DL10	75.200.DL10.1	20	115	9.6	2.5
DL12	75.160.DL12	75.160.DL12.1	16	80	11.5	2.5
DL12	75.200.DL12	75.200.DL12.1	20	105	11.5	2.5
DL16	75.200.DL16	75.200.DL16.1	20	80	15.5	3
DL16	75.250.DL16	75.250.DL16.1	25	115	15.5	3
DL20	75.250.DL20	75.250.DL20.1	25	95	19.3	3
DL25	75.320.DL25	75.320.DL25.1	32	105	24	5
DL32	75.400.DL32	75.400.DL32.1	40	140	31	5
DL32	75.500.DL32	75.500.DL32.1	50	200	31	5

Duo-Lock extensions conical: short with Safe-Lock

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [inch]	Length L1 [inch]	Outer Ø D2 [inch]	Internal bore Ø D3 [inch]
DL10	75.1/2z0.DL10	75.1/2z0.DL10.1	1/2	2.5	0.3593	0.0984
DL10	75.5/8z0.DL10	75.5/8z0.DL10.1	5/8	3.5	0.3593	0.0984
DL10	75.3/4z0.DL10	75.3/4z0.DL10.1	3/4	4.5	0.3593	0.0984
DL12	75.5/8z0.DL12	75.5/8z0.DL12.1	5/8	3.25	0.4803	0.0984
DL12	75.3/4z0.DL12	75.3/4z0.DL12.1	3/4	4.25	0.4803	0.0984
DL16	75.3/4z0.DL16	75.3/4z0.DL16.1	3/4	3.25	0.6053	0.1181
DL16	75.1z0.DL16	75.1z0.DL16.1	1	4.5	0.6053	0.1181
DL20	75.1z0.DL20	75.1z0.DL20.1	1	3.75	0.7303	0.1181
DL25	75.11/4z0.DL25	75.11/4z0.DL25.1	11/4	4.25	0.9606	0.1969
DL32	75.11/2z0.DL32	75.11/2z0.DL32.1	11/2	5.5	1.2106	0.1969
DL32	75.2z0.DL32	75.2z0.DL32.1	2	7.5	1.2106	0.1969

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

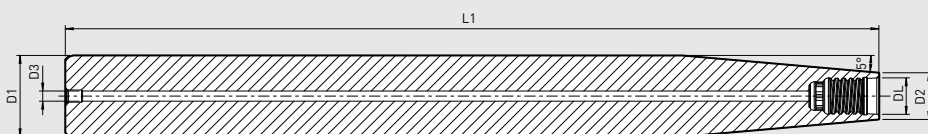
Attention: For a long lifetime of the system, the compliance with the torque is required.

METRIC

INCH

DUO-LOCK® EXTENSIONS CONICAL – LONG – STEEL

HAIMER®

Tooling
Technology

Version: conical, long

- Shank tolerance: h6
- With inner coolant bore
- Vibration dampening on request
- Safe-Lock for an extra charge
- Cutting to length possible for an extra charge

Also available:

Extensions with coating – for perfect shrinking in and out even at high forces during machining

Duo-Lock extensions conical: long

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [mm]	Length L1 [mm]	Outer Ø D2 [mm]	Internal bore Ø D3 [mm]
DL10	75.122.DL10	75.122.DL10.1	12	120	9.6	2.5
DL10	75.162.DL10	75.162.DL10.1	16	160	9.6	2.5
DL10	75.202.DL10	75.202.DL10.1	20	200	9.6	2.5
DL12	75.162.DL12	75.162.DL12.1	16	160	11.5	2.5
DL12	75.202.DL12	75.202.DL12.1	20	200	11.5	2.5
DL16	75.202.DL16	75.202.DL16.1	20	200	15.5	3
DL16	75.252.DL16	75.252.DL16.1	25	250	15.5	3
DL20	75.252.DL20	75.252.DL20.1	25	250	19.3	3
DL25	75.322.DL25	75.322.DL25.1	32	250	24	5
DL32	75.402.DL32	75.402.DL32.1	40	250	31	5
DL32	75.502.DL32	75.502.DL32.1	50	250	31	5

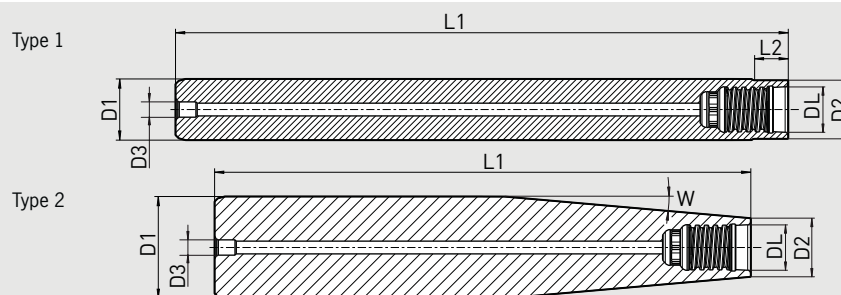
Duo-Lock extensions conical: long

Interface DL	Order No.	Order No. with Coating	Clamping Ø D1 [inch]	Length L1 [inch]	Outer Ø D2 [inch]	Internal bore Ø D3 [inch]
DL10	75.1/2z2.DL10	75.1/2z2.DL10.1	1/2	5	0.3593	0.0984
DL10	75.5/8z2.DL10	75.5/8z2.DL10.1	5/8	6.25	0.3593	0.0984
DL10	75.3/4z2.DL10	75.3/4z2.DL10.1	3/4	7.5	0.3593	0.0984
DL12	75.5/8z2.DL12	75.5/8z2.DL12.1	5/8	6.25	0.4803	0.0984
DL12	75.3/4z2.DL12	75.3/4z2.DL12.1	3/4	7.5	0.4803	0.0984
DL16	75.3/4z2.DL16	75.3/4z2.DL16.1	3/4	7.5	0.6053	0.1181
DL16	75.1z2.DL16	75.1z2.DL16.1	1	10	0.6053	0.1181
DL20	75.1z2.DL20	75.1z2.DL20.1	1	10	0.7303	0.1181
DL25	75.11/4z2.DL25	75.11/4z2.DL25.1	11/4	10	0.9606	0.1969
DL32	75.11/2z2.DL32	75.11/2z2.DL32.1	11/2	10	1.2106	0.1969
DL32	75.2z2.DL32	75.2z2.DL32.1	2	10	1.2106	0.1969

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

**Version: Heavy metal**

- L1, L2 and W angle customizable
- Shank tolerance: h6
- With inner coolant bore
- Optional with Safe-Lock

Duo-Lock extensions: Heavy metal

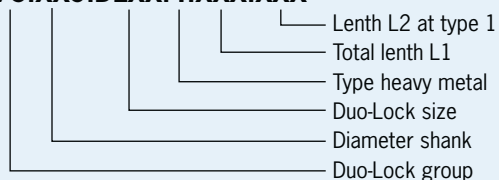
Interface DL	Order No.	Clamping Ø D1 [mm]	Length max. L1 [mm]	Internal bore D3 [mm]
DL10	75.109.DL10.4.XXX.XXX	10	150	2.5
DL10 - DL12	75.129.DLXX.4.XXX.XXX	12	180	2.5
DL10 - DL16	75.169.DLXX.4.XXX.XXX	16	240	3
DL10 - DL20	75.209.DLXX.4.XXX.XXX	20	260	3
DL10 - DL25	75.259.DLXX.4.XXX.XXX	25	260	3
DL10 - DL32	75.329.DLXX.4.XXX.XXX	32	260	5
DL10 - DL32	75.409.DLXX.4.XXX.XXX	40	260	5
DL10 - DL32	75.509.DLXX.4.XXX.XXX	50	260	5

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	15	25	40	60	90	130

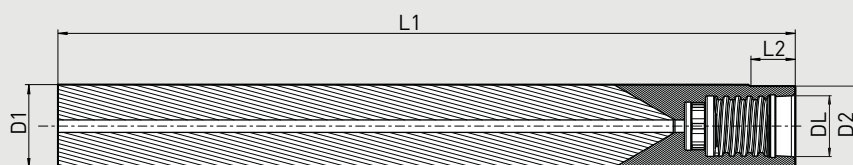
Attention: For a long lifetime of the system, the compliance with the torque is required.
The torque specification is given on the extension.

Interface DL	Fix Ø D2 [mm]	Standard L2 [mm]
DL10	9.6	5
DL12	11.5	6
DL16	15.5	8
DL20	19.3	10
DL25	24	12.5
DL32	31	16

Legend Order No.:**75.XX9.DLXX.4.XXX.XXX**

METRIC

INCH

**DUO-LOCK® EXTENSIONS
CARBIDE****Version: Carbide**

- L1 and L2 customizable
- Shank tolerance: h6
- With inner coolant bore
- Optional with Safe-Lock

Duo-Lock extensions cylindrical: long

Interface DL	Order No.	Clamping Ø D1 [mm]	Length max. L1 [mm]	Fix Ø D2 [mm]	Standard L2 [mm]
DL10	75.109.DL10.5.XXX.XXX	10	150	9.6	5
DL12	75.129.DL12.5.XXX.XXX	12	180	11.5	6
DL16	75.169.DL16.5.XXX.XXX	16	240	15.5	8
DL20	75.209.DL20.5.XXX.XXX	20	260	19.3	10
DL25	75.259.DL25.5.XXX.XXX	25	260	24	12.5
DL32	75.329.DL32.5.XXX.XXX	32	260	31	16

Duo-Lock extensions cylindrical: long

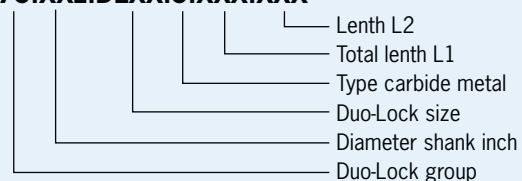
Interface DL	Order No.	Clamping Ø D1 [inch]	Length max. L1 [inch]	Fix Ø D2 [inch]	Standard L2 [inch]
DL10	75.3/8z9.DL10.5.XXX.XXX	3/8	5.9055	0.3593	0.1875
DL12	75.1/2z9.DL12.5.XXX.XXX	1/2	7.0866	0.4803	0.25
DL16	75.5/8z9.DL16.5.XXX.XXX	5/8	9.4488	0.6053	0.3125
DL20	75.3/4z9.DL20.5.XXX.XXX	3/4	10.2362	0.7303	0.375
DL25	75.1z9.DL25.5.XXX.XXX	1	10.2362	0.9606	0.5
DL32	75.11/4z9.DL32.5.XXX.XXX	1 1/4	10.2362	1.2106	0.625

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

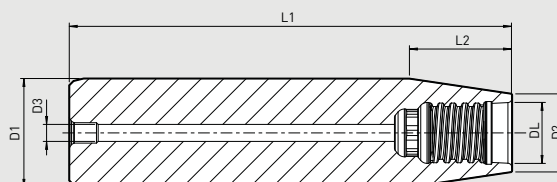
For more Duo-Lock information, please see pages "Torque Master" 247 - 249

Legend Order No.:**75.XXz.DLXX.5.XXX.XXX**

DUO-LOCK® EXTENSIONS
HEAVY DUTY – STEEL

METRIC

INCH

**Version: Heavy Duty**

- Shank tolerance: h6
- With inner coolant bore
- With Safe-Lock as standard

Also available:

Extension with coating – for perfect shrinking in and out even at high forces during machining

Duo-Lock extensions Heavy Duty with Safe-Lock

Interface DL	Order No.	Clamping Ø D1 [mm]	Length L1 [mm]	Length L2 [mm]	Outer Ø D2 [mm]	Internal bore Ø D3 [mm]
DL10	75.160.DL10.9	16	62.5	12.5	9.6	2.5
DL12	75.160.DL12.9	16	65	15	11.5	2.5
DL16	75.200.DL16.9	20	72	20	15.5	3
DL20	75.250.DL20.9	25	82	24	19.3	3

Duo-Lock extensions Heavy Duty with Safe-Lock

Interface DL	Order No.	Clamping Ø D1 [inch]	Length L1 [inch]	Neck length L2 [inch]	Outer Ø D2 [inch]	Internal bore Ø D3
DL10	75.5/8z0.DL10.9	5/8	2.4606	0.4921	0.3593	0.0984
DL12	75.5/8z0.DL12.9	5/8	2.5591	0.5906	0.4803	0.0984
DL16	75.3/4z0.DL16.9	3/4	2.8346	0.7874	0.6053	0.1181
DL20	75.1z0.DL20.9	1	3.2283	0.9449	0.7303	0.1181

Torque of Duo-Lock interface

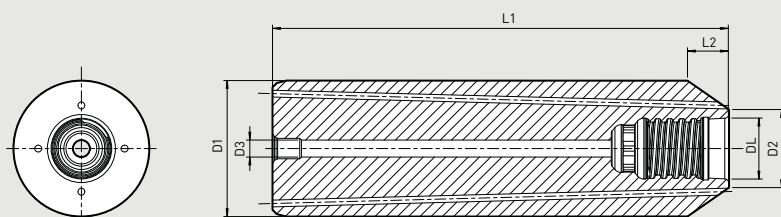
	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.

METRIC

INCH

DUO-LOCK® EXTENSIONS HEAVY DUTY WITH COOL JET – STEEL



Version: Heavy Duty with Cool Jet

- Shank tolerance: h6
- With Cool Jet
- With Safe-Lock as standard

Also available:

Extension with coating – for perfect shrinking in and out even at high forces during machining

Duo-Lock extensions Heavy Duty with Cool Jet

Interface DL	Order No.	Clamping Ø D1 [mm]	Length L1 [mm]	Length L2 [mm]	Outer Ø D2 [mm]	Internal bore Ø D3 [mm]
DL10	75.160.DL10.82	16	62.5	6	9.6	2.5
DL12	75.200.DL12.82	20	67	6	11.5	2.5
DL16	75.250.DL16.82	25	78	6	15.5	3
DL20	75.320.DL20.82	32	82	6	19.3	3

Duo-Lock extensions Heavy Duty with Cool Jet

Interface DL	Order No.	Clamping Ø D1 [inch]	Length L1 [inch]	Neck length L2 [inch]	Outer Ø D2 [inch]	Internal bore Ø D3
DL10	75.5/8z0.DL10.82	5/8	2.4606	0.2362	0.3593	0.0984
DL12	75.3/4z0.DL12.82	3/4	2.6378	0.2362	0.4803	0.0984
DL16	75.1z0.DL16.82	1	3.0709	0.2362	0.6053	0.1181
DL20	75.11/4z0.DL20.82	1 1/4	3.2283	0.2362	0.7303	0.1181

Torque of Duo-Lock interface

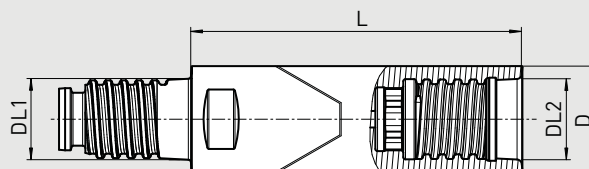
	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.

DUO-LOCK®
CARBIDE/STEEL EXTENSION

METRIC

INCH



Cylindrical carbide / steel Duo-Lock extension for fast and effective reaching of cavities.

– With inner coolant bore

Duo-Lock extension for extension

Interface DL1	Order No.	Interface DL2	Outer Ø D [mm]	Length L [mm]
DL10	75.DL10.DL10.030	DL10	9.6	30
DL12	75.DL12.DL12.040	DL12	11.5	40
DL16	75.DL16.DL16.050	DL16	15.5	50
DL20	75.DL20.DL20.060	DL20	19.3	60

Duo-Lock extension for extension

Interface DL1	Order No.	Interface DL2	Outer Ø D [inch]	Length L [inch]
DL10	75.DL10.DL10.030	DL10	0.3780	1.1811
DL12	75.DL12.DL12.040	DL12	0.4528	1.5748
DL16	75.DL16.DL16.050	DL16	0.6102	1.9685
DL20	75.DL20.DL20.060	DL20	0.7598	2.3622

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20
Nm	20	30	60	80

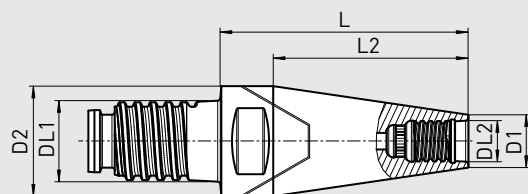
Attention: For a long lifetime of the system, the compliance with the torque is required.

METRIC

INCH

DUO-LOCK® CARBIDE/STEEL REDUCTION

HAIMER®

Tooling
Technology

Cylindrical carbide / steel Duo-Lock reduction for fast and effective reaching of cavities.

- With inner coolant bore
- External contour adaptation (L2) possible at extra cost (special request)

Duo-Lock reduction for extension

Interface DL1	Order No.	Interface DL2	Outer Ø D1 [mm]	Outer Ø D2 [mm]	Length L [mm]
DL12	75.DL12.DL10.030	DL10	9.6	11.5	30
DL16	75.DL16.DL10.035	DL10	9.6	15.5	35
DL16	75.DL16.DL12.035	DL12	11.5	15.5	35
DL20	75.DL20.DL10.045	DL10	9.6	19.3	45
DL20	75.DL20.DL12.045	DL12	11.5	19.3	45
DL20	75.DL20.DL16.045	DL16	15.5	19.3	45

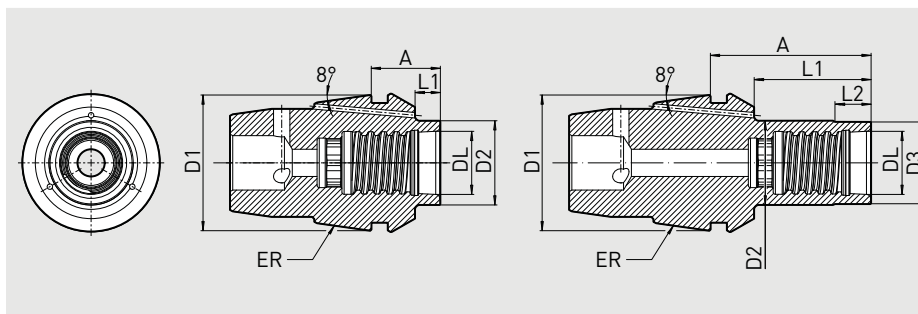
Duo-Lock reduction for extension

Interface DL1	Order No.	Interface DL2	Outer Ø D1 [inch]	Outer Ø D2 [inch]	Length L [inch]
DL12	75.DL12.DL10.030	DL10	0.3780	0.4528	1.1811
DL16	75.DL16.DL10.035	DL10	0.3780	0.6102	1.3780
DL16	75.DL16.DL12.035	DL12	0.4528	0.6102	1.3780
DL20	75.DL20.DL10.045	DL10	0.3780	0.7598	1.7717
DL20	75.DL20.DL12.045	DL12	0.4528	0.7598	1.7717
DL20	75.DL20.DL16.045	DL16	0.6102	0.7598	1.7717

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.



- Useable for Duo-Lock milling heads from DL10 – DL25
- Compatible with all established ER systems
- Optional with Cool Jet 3 or 6 bores
- Accessories see page 250

Duo-Lock collets

Order No.	ER Size	Nominal Ø D1 [mm]	Length A [mm]	Length L1 [mm]	Length L2 [mm]	Outer Ø D2 [mm]	Neck Ø D3 [mm]	Duo-Lock Size DL
81.160.0120.DL10	ER16	16	12	5.3	–	9.6	–	DL10
81.200.0130.DL10	ER20	20	13	5.48	–	9.6	–	DL10
81.200.0140.DL12	ER20	20	14	6.48	–	11.5	–	DL12
81.250.0135.DL10	ER25	25	13.5	5.5	–	9.6	–	DL10
81.250.0145.DL12	ER25	25	14.5	6.5	–	11.5	–	DL12
81.250.0135.DL16	ER25	25	13.5	5.5	–	15.5	–	DL16
81.320.0140.DL10	ER32	32	14	5	–	9.6	–	DL10
81.320.0355.DL10	ER32	32	35.5	26.5	5	10	9.6	DL10
81.320.0150.DL12	ER32	32	15	6	–	11.5	–	DL12
81.320.0365.DL12	ER32	32	36.5	27.5	6	12	11.5	DL12
81.320.0170.DL16	ER32	32	17	8	–	15.5	–	DL16
81.320.0355.DL16	ER32	32	35.5	26.5	8	16	15.5	DL16
81.320.0190.DL20	ER32	32	19	10	–	19.3	–	DL20
81.320.0355.DL20	ER32	32	35.5	26.5	10	20	19.3	DL20
81.320.0215.DL25	ER32	32	21.5	12.5	–	24	–	DL25
81.320.0407.DL25	ER32	32	40.75	31.75	–	24	–	DL25

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

Accessories

Cool Jet with 3 coolant bores

Order No. 91.100.25

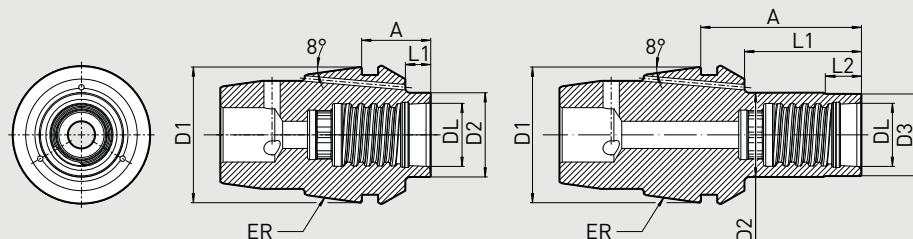
Cool Jet with 6 coolant bores

Order No. 91.100.31



Alternatively we recommend using our shrink fit collets in driven tools.

INCH

**DUO-LOCK®
COLLETS**

- Useable for Duo-Lock milling heads from DL10 – DL25
- Compatible with all established ER systems
- Optional with Cool Jet 3 or 6 bores
- Accessories see page 250

Duo-Lock collets

Order No.	ER Size	Nominal Ø D1 [mm]	Length A [inch]	Length L1 [inch]	Length L2 [inch]	Outer Ø D2 [inch]	Neck Ø D3 [inch]	Duo-Lock Size DL
81.160.0120.DL10	ER16	16	0.4724	0.2087	-	0.3780	-	DL10
81.200.0130.DL10	ER20	20	0.5118	0.2157	-	0.3780	-	DL10
81.200.0140.DL12	ER20	20	0.5512	0.2582	-	0.4528	-	DL12
81.250.0135.DL10	ER25	25	0.5315	0.2165	-	0.3780	-	DL10
81.250.0145.DL12	ER25	25	0.5709	0.2559	-	0.4528	-	DL12
81.250.0135.DL16	ER25	25	0.5315	0.2165	-	0.6102	-	DL16
81.320.0140.DL10	ER32	32	0.5512	0.1969	-	0.3780	-	DL10
81.320.0355.DL10	ER32	32	1.3976	1.0433	0.1969	0.3937	0.3780	DL10
81.320.0150.DL12	ER32	32	0.5906	0.2362	-	0.4528	-	DL12
81.320.0355.DL12	ER32	32	1.4370	1.0827	0.2362	0.4724	0.4528	DL12
81.320.0170.DL16	ER32	32	0.6693	0.3150	-	0.6102	-	DL16
81.320.0355.DL16	ER32	32	1.3976	1.0433	0.315	0.6299	0.6102	DL16
81.320.0190.DL20	ER32	32	0.7480	0.3937	-	0.7598	-	DL20
81.320.0355.DL20	ER32	32	1.3976	1.0433	0.3937	0.7874	0.7598	DL20
81.320.0215.DL25	ER32	32	0.8465	0.4921	-	0.9449	-	DL25
81.320.0407.DL25	ER32	32	1.6043	1.25	-	0.9449	-	DL25

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25
Nm	20	30	60	80	100

Attention: For a long lifetime of the system, the compliance with the torque is required.

Accessories**Cool Jet with 3 coolant bores**

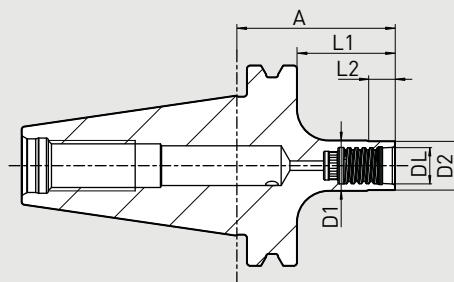
Order No. 91.100.25

Cool Jet with 6 coolant bores

Order No. 91.100.31

DUO-LOCK® MONOBLOCK HOLDER
DIN ISO 7388-1 · SK40

METRIC



CERTIFICATE OF QUALITY

- ☒ Chuck body fine balanced
G2.5 25,000 rpm
or U<1 gmm
- ☒ All functional surfaces fine machined
- ☒ Taper tolerance AT3
- ☒ Coolant supply form AD/AF

Duo-Lock Monoblock holder for direct clamping.
Perfectly suitable for milling with short overhang.

With steep taper SK40 Form AD/AF DIN ISO 7388-1
(formerly DIN 69871).

Form AD/AF means: central coolant supply and coolant channels on
the collar which can be sealed again.

- All holders incl. inner coolant
- Hardened 54-2 HRC

SK40

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [mm]		10	12	16	20	25	32
∅ D2 [mm]		9.6	11.5	15.5	19.3	24	31
L1 [mm]		21.9	21.9	30.9	30.9	36.9	45.9
L2 [mm]		5	6	8	10	12.5	16
Length A [mm]	short	41	41	50	50	56	65
Order No.	40.490.DL...	10	12	16	20	25	32

Torque of Duo-Lock interface						
	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

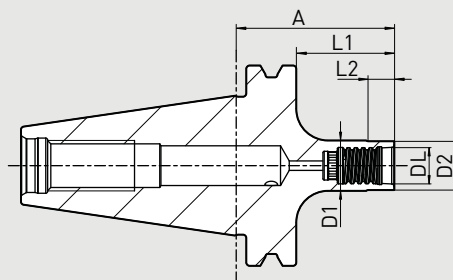
Attention: For a long lifetime of the system, the compliance with the torque is required.

INCH

DUO-LOCK® MONOBLOCK HOLDER CAT 40 · ASME B5.50

CERTIFICATE OF QUALITY

- ☒ Chuck body fine balanced
G2.5 25,000 rpm
or U<1 gmm
- ☒ All functional surfaces fine machined
- ☒ Taper tolerance AT3
- ☒ Coolant supply form AD/AF



Duo-Lock Monoblock holder for direct clamping.
Perfectly suitable for milling with short overhang.

Form AD/AF means: central coolant supply and coolant channels on the collar which can be sealed again.

- All holders incl. inner coolant
- Hardened 54-2 HRC

CAT 40

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [inch]		3/8	1/2	5/8	3/4	1	1 1/4
∅ D2 [inch]		0.3593	0.4803	0.6053	0.7303	0.9606	1.2106
L1 [inch]		0.87	0.87	1.25	1.25	1.5	1.75
L2 [inch]		0.1875	0.25	0.3125	0.375	0.5	0.625
Length A [inch]	short	1.6201	1.6201	2.00	2.00	2.25	2.50
Order No.	40.890.DL...	10.i	12.i	16.i	20.i	25.i	32.i



Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

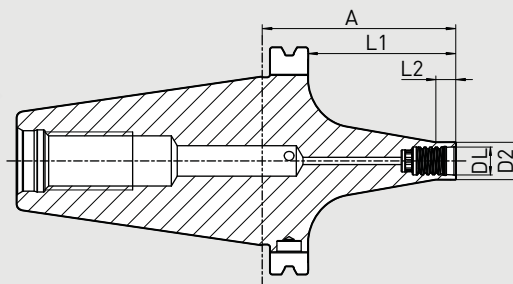
Attention: For a long lifetime of the system, the compliance with the torque is required.

For more Duo-Lock information, please see pages "Torque Master" 247 - 249

DUO-LOCK® MONOBLOCK HOLDER
DIN ISO 7388-1 · SK50

METRIC

INCH



CERTIFICATE OF QUALITY

- ☒ Chuck body fine balanced
G2.5 25,000 rpm
or U<1 gmm
- ☒ All functional surfaces fine machined
- ☒ Taper tolerance AT3
- ☒ Coolant supply form AD/AF

Duo-Lock Monoblock holder for direct clamping.
Perfectly suitable for milling and also for grinding Duo-Lock blanks.

Form AD/AF means: central coolant supply and coolant channels on the collar which can be sealed again.

With steep taper SK50 Form AD/AF DIN ISO 7388-1
(formerly DIN 69871).

- All holders incl. inner coolant
- Hardened 54-2 HRC
- Reinforced geometry
- Incl. ground sensor surface and labeled correction value

SK50

Interface		DL10	DL12	DL16	DL20	DL25	DL32
Ø D2 [mm]		9.6	11.5	15.5	19.3	24	31
L1 [mm]		60.9	60.9	60.9	60.9	60.9	60.9
L2 [mm]		5	6	8	10	12.5	16
Length A [mm]	short	80	80	80	80	80	80
Order No.	50.490.DL...	10	12	16	20	25	32

SK50

Interface		DL10	DL12	DL16	DL20	DL25	DL32
Ø D1 [inch]		0.3780	0.4528	0.6102	0.7598	0.9449	1.2205
Ø D2 [inch]		2.3976	2.3976	2.3976	2.3976	2.3976	2.3976
L1 [inch]		0.1969	0.2362	0.3150	0.3937	0.4921	0.6299
L2 [inch]		0.1875	0.25	0.3125	0.375	0.5	0.625
Length A [inch]	short	3.1496	3.1496	3.1496	3.1496	3.1496	3.1496
Order No.	50.490.DL...	10	12	16	20	25	32

Torque of Duo-Lock interface						
	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

For more Duo-Lock information, please see pages "Torque Master" 247 - 249

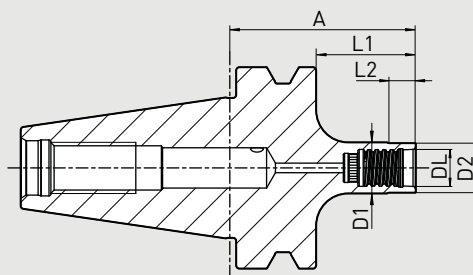
METRIC

INCH

DUO-LOCK® MONOBLOCK HOLDER JIS B 6339 · BT40

CERTIFICATE OF QUALITY

- ☒ Chuck body fine balanced
G2.5 25,000 rpm
or U<1 gmm
- ☒ All functional surfaces fine machined
- ☒ Taper tolerance AT3
- ☒ Coolant supply form AD/AF



Duo-Lock Monoblock holder for direct clamping.
Perfectly suitable for milling with short overhang.

Form AD/AF means: central coolant supply and coolant channels on the collar which can be sealed again.

With steep taper BT40 Form JIS B 6339.

- All holders incl. inner coolant
- Hardened 54-2 HRC

BT40

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [mm]		10	12	16	20	25	32
∅ D2 [mm]		9.6	11.5	15.5	19.3	24	31
L1 [mm]		22	22	31	31	33	41
L2 [mm]		5	6	8	10	12.5	16
Length A [mm]	short	49	49	58	58	60	68
Order No.	40.690.DL...	10	12	16	20	25	32

BT40

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [inch]		3/8	1/2	5/8	3/4	1	1 1/4
∅ D2 [inch]		0.3593	0.4803	0.6053	0.7303	0.9606	1.2106
L1 [inch]		0.9370	0.9370	1.1870	1.1870	1.3170	1.6870
L2 [inch]		0.1875	0.25	0.3125	0.375	0.5	0.625
Length A [inch]	short	2.00	2.00	2.25	2.25	2.38	2.75
Order No.	40.690.DL...	10.i	12.i	16.i	20.i	25.i	32.i

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

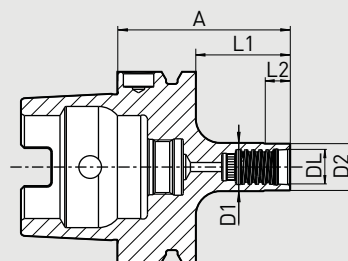
Attention: For a long lifetime of the system, the compliance with the torque is required.

For more Duo-Lock information, please see pages "Torque Master" 247 - 249

DUO-LOCK® MONOBLOCK HOLDER
DIN 69893-1 · HSK-A63

METRIC

INCH



CERTIFICATE OF QUALITY

- ☒ Chuck body fine balanced
G2.5 25,000 rpm
or U<1 gmm
- ☒ All functional surfaces fine machined
- ☒ More accurate than DIN

Duo-Lock Monoblock holder for direct clamping.
Perfectly suitable for milling with short overhang.

- All holders incl. inner coolant
- Hardened 54-2 HRC

HSK-A63

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [mm]		10	12	16	20	25	32
∅ D2 [mm]		9.6	11.5	15.5	19.3	24	31
L1 [mm]		22	26	31	31	35	46
L2 [mm]		5	6	8	10	12.5	16
Length A [mm]	short	48	52	57	57	61	72
Order No.	A63.190.DL...	10	12	16	20	25	32

HSK-A63

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [inch]		3/8	1/2	5/8	3/4	1	1 1/4
∅ D2 [inch]		0.3593	0.4803	0.6053	0.7303	0.9606	1.2106
L1 [inch]		0.9783	1.2283	1.2283	1.2283	1.4783	1.8583
L2 [inch]		0.1875	0.25	0.3125	0.375	0.5	0.625
Length A [inch]	short	2.00	2.25	2.25	2.25	2.50	2.88
Order No.	A63.190.DL...	10.i	12.i	16.i	20.i	25.i	32.i

Torque of Duo-Lock interface						
	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

For more Duo-Lock information, please see pages "Torque Master" 247 - 249

METRIC

INCH

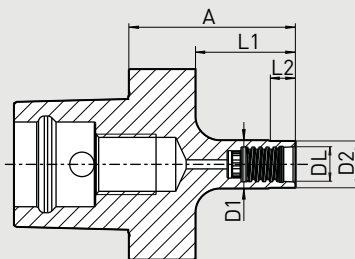
DUO-LOCK® MONOBLOCK HOLDER ISO 26623-1 · PSC 63

HAIMER®

Tooling
Technology

CERTIFICATE OF QUALITY

- ☒ Chuck body fine balanced
G2.5 25,000 rpm
or U<1 gmm
- ☒ All functional surfaces fine machined
- ☒ More accurate than DIN



Duo-Lock Monoblock holder for direct clamping.
Perfectly suitable for milling with short overhang.

- All holders incl. inner coolant
- Hardened 54-2 HRC

PSC 63

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [mm]		10	12	16	20	25	32
∅ D2 [mm]		9.6	11.5	15.5	19.3	24	31
L1 [mm]		28	28	33	33	38	46
L2 [mm]		5	6	8	10	12.5	16
Length A [mm]	short	50	50	55	55	60	68
Order No.	CC6.190.DL...	10	12	16	20	25	32

PSC 63

Interface		DL10	DL12	DL16	DL20	DL25	DL32
∅ D1 [inch]		3/8	1/2	5/8	3/4	1	1 1/4
∅ D2 [inch]		0.3593	0.4803	0.6053	0.7303	0.9606	1.2106
L1 [inch]		1.1319	1.1319	1.3819	1.3819	1.5119	1.8819
L2 [inch]		0.1875	0.25	0.3125	0.375	0.5	0.625
Length A [inch]	short	2.00	2.00	2.25	2.25	2.38	2.75
Order No.	CC6.190.DL...	10.i	12.i	16.i	20.i	25.i	32.i

Torque of Duo-Lock interface

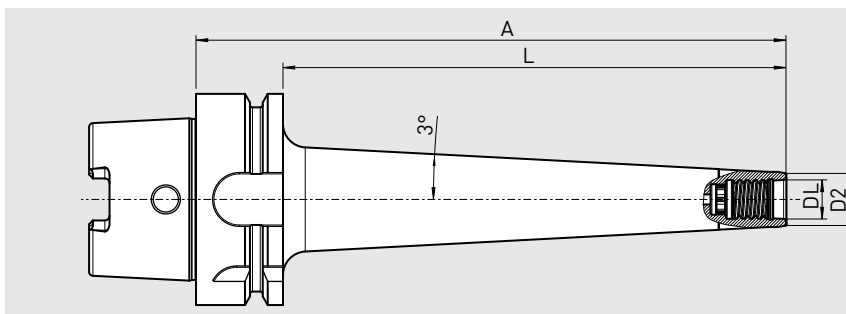
	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

For more Duo-Lock information, please see pages "Torque Master" 247 - 249

DUO-LOCK® DIE AND MOLD CHUCK
DIN 69893-1 · HSK-A63

METRIC



Duo-Lock Die and Mold Chuck for direct Duo-Lock clamping.

- With inner coolant bore
- Stable 3° angle for perfect milling on inclined forms
- Including carbide core for vibration-damped milling with long overhang lengths
- Repair possible at extra cost (if end mill breaks in interface)

HSK-A63

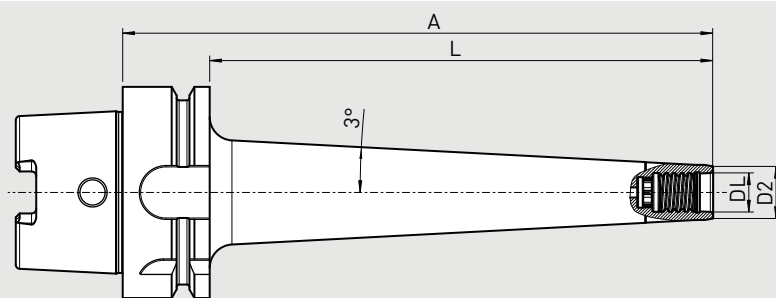
Interface DL	Order No.	Outer Ø D2 [mm]	Length L [mm]	Length A [mm]
DL10	A63.180.DL10.100	9.6	100	126
DL10	A63.180.DL10.125	9.6	125	151
DL10	A63.180.DL10.150	9.6	150	176
DL12	A63.180.DL12.100	11.5	100	126
DL12	A63.180.DL12.125	11.5	125	151
DL12	A63.180.DL12.150	11.5	150	176
DL16	A63.180.DL16.100	15.5	100	126
DL16	A63.180.DL16.125	15.5	125	151
DL16	A63.180.DL16.150	15.5	150	176
DL16	A63.180.DL16.175	15.5	175	201
DL16	A63.180.DL16.200	15.5	200	226
DL16	A63.180.DL16.250	15.5	250	276
DL20	A63.180.DL20.100	19.3	100	126
DL20	A63.180.DL20.125	19.3	125	151
DL20	A63.180.DL20.150	19.3	150	176
DL20	A63.180.DL20.175	19.3	175	201
DL20	A63.180.DL20.200	19.3	200	226
DL20	A63.180.DL20.250	19.3	250	276

Torque of Duo-Lock interface				
	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.

INCH

DUO-LOCK® DIE AND MOLD CHUCK DIN 69893-1 · HSK-A63



Duo-Lock Die and Mold Chuck for direct Duo-Lock clamping.

- With inner coolant bore
- Stable 3° angle for perfect milling on inclined forms
- Including carbide core for vibration-damped milling with long overhang lengths
- Repair possible at extra cost (if end mill breaks in interface)

HSK-A63

Interface DL	Order No.	Outer Ø D2 [inch]	Length L [inch]	Length A [inch]
DL10	A63.180.DL10.100	0.3780	3.9370	4.9606
DL10	A63.180.DL10.125	0.3780	4.9213	5.9449
DL10	A63.180.DL10.150	0.3780	5.9055	6.9291
DL12	A63.180.DL12.100	0.4528	3.9370	4.9606
DL12	A63.180.DL12.125	0.4528	4.9213	5.9449
DL12	A63.180.DL12.150	0.4528	5.9055	6.9291
DL16	A63.180.DL16.100	0.6102	3.9370	4.9606
DL16	A63.180.DL16.125	0.6102	4.9213	5.9449
DL16	A63.180.DL16.150	0.6102	5.9055	6.9291
DL16	A63.180.DL16.175	0.6102	6.8898	7.9134
DL16	A63.180.DL16.200	0.6102	7.8740	8.8976
DL16	A63.180.DL16.250	0.6102	9.8425	10.8661
DL20	A63.180.DL20.100	0.7598	3.9370	4.9606
DL20	A63.180.DL20.125	0.7598	4.9213	5.9449
DL20	A63.180.DL20.150	0.7598	5.9055	6.9291
DL20	A63.180.DL20.175	0.7598	6.8898	7.9134
DL20	A63.180.DL20.200	0.7598	7.8740	8.8976
DL20	A63.180.DL20.250	0.7598	9.8425	10.8661

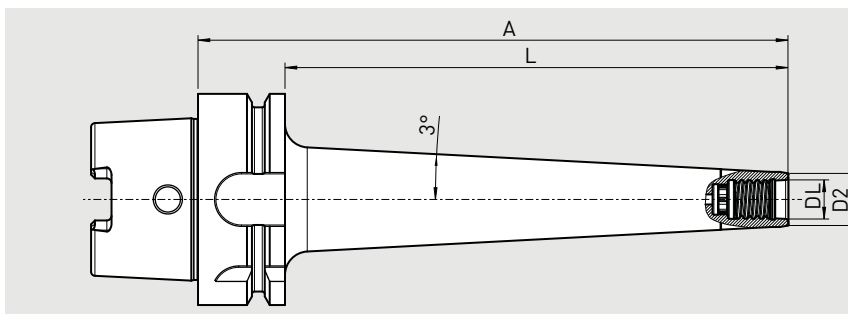
Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.

DUO-LOCK® DIE AND MOLD CHUCK
DIN 69893-1 · HSK-A100

METRIC



Duo-Lock Die and Mold Chuck for direct Duo-Lock clamping.

- With inner coolant bore
- Stable 3° angle for perfect milling on inclined forms
- Including carbide core for vibration-damped milling with long overhang lengths
- Repair possible at extra cost (if end mill breaks in interface)

HSK-A100

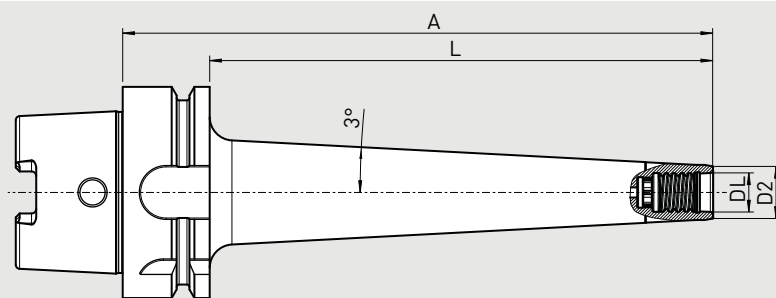
Interface DL	Order No.	Outer Ø D2 [mm]	Length L [mm]	Length A [mm]
DL10	A10.180.DL10.100	9.6	100	129
DL10	A10.180.DL10.150	9.6	150	179
DL12	A10.180.DL12.100	11.5	100	129
DL12	A10.180.DL12.150	11.5	150	179
DL12	A10.180.DL12.200	11.5	200	229
DL12	A10.180.DL12.250	11.5	250	279
DL16	A10.180.DL16.100	15.5	100	129
DL16	A10.180.DL16.150	15.5	150	179
DL16	A10.180.DL16.200	15.5	200	229
DL16	A10.180.DL16.250	15.5	250	279
DL20	A10.180.DL20.100	19.3	100	129
DL20	A10.180.DL20.150	19.3	150	179
DL20	A10.180.DL20.200	19.3	200	229
DL20	A10.180.DL20.250	19.3	250	279

Torque of Duo-Lock interface				
	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.

INCH

DUO-LOCK® DIE AND MOLD CHUCK DIN 69893-1 · HSK-A100



Duo-Lock Die and Mold Chuck for direct Duo-Lock clamping.

- With inner coolant bore
- Stable 3° angle for perfect milling on inclined forms
- Including carbide core for vibration-damped milling with long overhang lengths
- Repair possible at extra cost (if end mill breaks in interface)

HSK-A100

Interface DL	Order No.	Outer Ø D2 [inch]	Length L [inch]	Length A [inch]
DL10	A10.180.DL10.100	0.3780	3.9370	5.0787
DL10	A10.180.DL10.150	0.3780	5.9055	7.0472
DL12	A10.180.DL12.100	0.4528	3.9370	5.0787
DL12	A10.180.DL12.150	0.4528	5.9055	7.0472
DL12	A10.180.DL12.200	0.4528	7.8740	9.0157
DL12	A10.180.DL12.250	0.4528	9.8425	10.9843
DL16	A10.180.DL16.100	0.6102	3.9370	5.0787
DL16	A10.180.DL16.150	0.6102	5.9055	7.0472
DL16	A10.180.DL16.200	0.6102	7.8740	9.0157
DL16	A10.180.DL16.250	0.6102	9.8425	10.9843
DL20	A10.180.DL20.100	0.7598	3.9370	5.0787
DL20	A10.180.DL20.150	0.7598	5.9055	7.0472
DL20	A10.180.DL20.200	0.7598	7.8740	9.0157
DL20	A10.180.DL20.250	0.7598	9.8425	10.9843

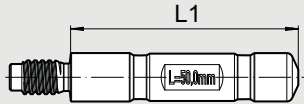
Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20
Nm	20	30	60	80

Attention: For a long lifetime of the system, the compliance with the torque is required.

DUO-LOCK® LENGTH PRESETTING TOOL

METRIC

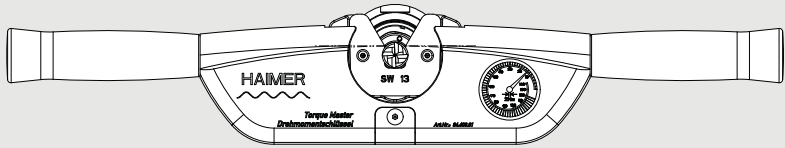


- Presetting aid
- Length presetting

Duo-Lock length presetting tool		
Order No.	Size	L1
75.000.DL10	DL10	50 $\pm 0,01$
75.000.DL12	DL12	50 $\pm 0,01$
75.000.DL16	DL16	50 $\pm 0,01$
75.000.DL20	DL20	50 $\pm 0,01$
75.000.DL25	DL25	50 $\pm 0,01$
75.000.DL32	DL32	50 $\pm 0,01$



DUO-LOCK® TORQUE MASTER



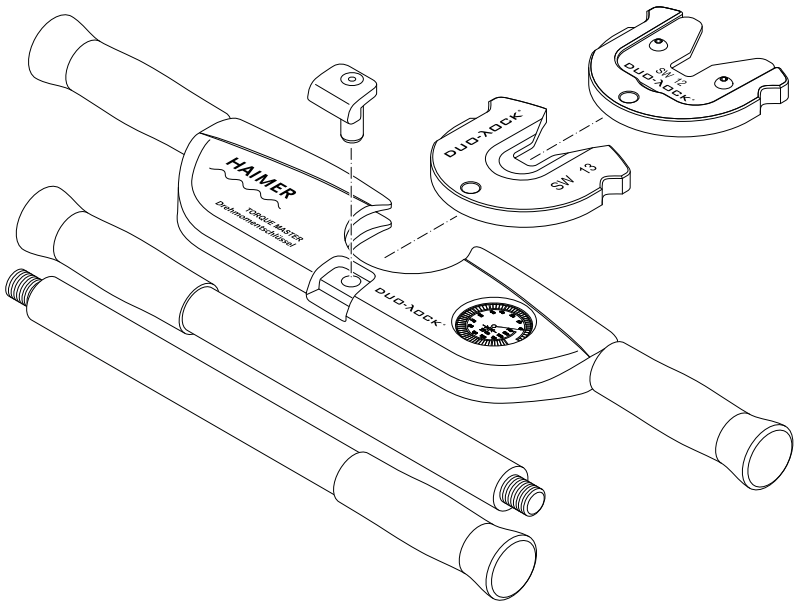
Two-armed torque wrench for Duo-Lock:

- For highest runout accuracy, avoids one-sided clamping
- Optimal power transmission by constant force application
- Torque wrench for highest clamping accuracy and repeatability with dial gauge
- Maximum torque for highest clamping force
- No overloading of smaller clamping diameters
- Changeable inserts, useable also for standard ER-Nuts
- Extended grips for DL16 – DL32

Torque wrench for Duo-Lock	
Torque Master Set Duo-Lock (with case, 6 inserts and grip sets, long)	84.600.20.AK
Torque Master Duo-Lock incl. grip set long (without inserts)	84.600.20
Grip set long for Torque Master Duo-Lock	84.600.10.1

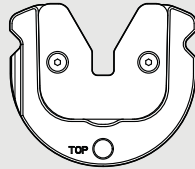
Torque of Duo-Lock interface						
	DL10	DL12	DL16	DL20	DL25	DL32
Nm	20	30	60	80	100	130

Attention: For a long lifetime of the system, the compliance with the torque is required.

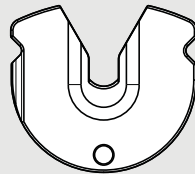


INSERTS FOR DUO-LOCK® TORQUE MASTER

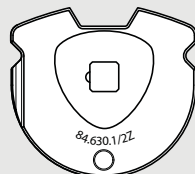
METRIC



DL10 – DL12: With wear insert



DL16 – DL32: Made of a single piece



To insert all common square socket wrenches with 1/2"

- Exchangeable inserts for Duo-Lock Torque Master
- Suitable for Duo-Lock milling heads

Inserts		
Order No.	Size	AF [mm]
84.640.10	DL10	8
84.640.12	DL12	9.5
84.640.16	DL16	13
84.640.20	DL20	16
84.640.25	DL25	21
84.640.32	DL32	28
84.630.1/2Z	To insert all common square socket wrenches with 1/2"	

Accessories

Wear insert

Size			DL10	DL12
Order No.	84.640...		.10.1	.12.1



ROLLER BEARING WRENCH FOR CLAMPING DUO-LOCK® BLANKS

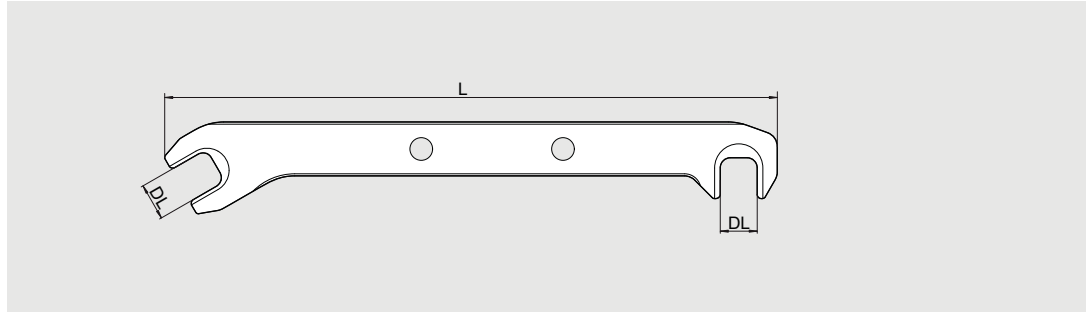


- Useable for Duo-Lock blanks from DL10 – DL20
- For square socket ratchet with 1/2"

Roller Bearing Wrench	
Order No.	Size
84.645.DL10	DL10
84.645.DL12	DL12
84.645.DL16	DL16
84.645.DL20	DL20

DUO-LOCK® HAND WRENCH

METRIC

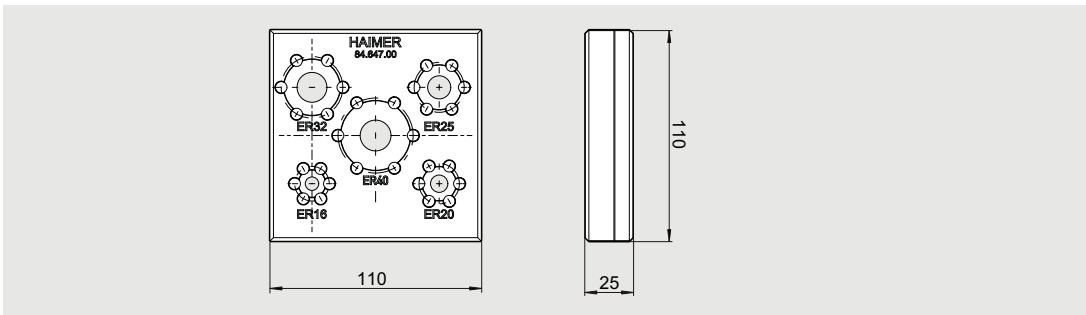
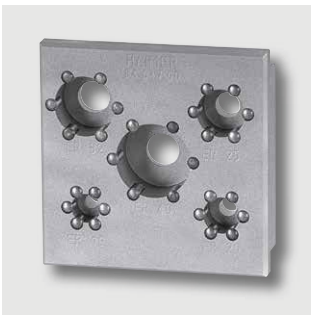


- Useable for Duo-Lock tool heads from DL10 – DL20
- For replacing Duo-Lock tool heads directly in the lathe

Duo-Lock Hand wrench			
Order No.	Size	Overall length L [mm]	Overall length L [inch]
84.647.DL10	DL10	196	7.7165
84.647.DL12	DL12	199	7.8346
84.647.DL16	DL16	217	8.5433
84.647.DL20	DL20	236	9.2913

DUO-LOCK® COLLETS CLAMPING DEVICE

METRIC

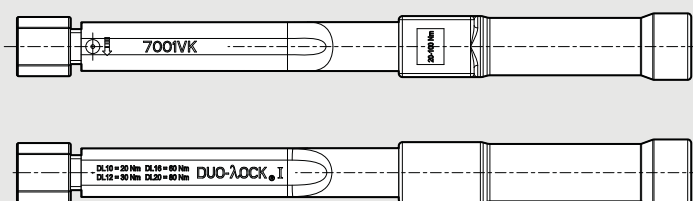


- Useable for Duo-Lock collets from ER16, ER20, ER25, ER32, ER40
- Clamping surfaces for the tension in the vice

Duo-Lock collets clamping device	
Order No.	Size
84.647.00	ER16, ER20, ER25, ER32, ER40

METRIC

7001 TORQUE WRENCH DL10 – DL20



- 7001 torque wrench with changeover ratchet
- For changing Duo-Lock tool heads directly in the lathe
- Torque: 20 – 100 Nm
- Useable for Duo-Lock milling heads from DL10 – DL20
- Connecting size 9 x 12 mm
- Changeable to clockwise and counter clockwise

Torque wrench for Duo-Lock

Order No.

7001 Torque wrench 9 x 12 mm

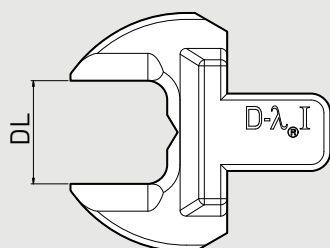
82.587.00

Torque of Duo-Lock interface

	DL10	DL12	DL16	DL20
Nm	20	30	60	80

METRIC

DUO-LOCK® INSERTS FOR 7001 TORQUE WRENCH



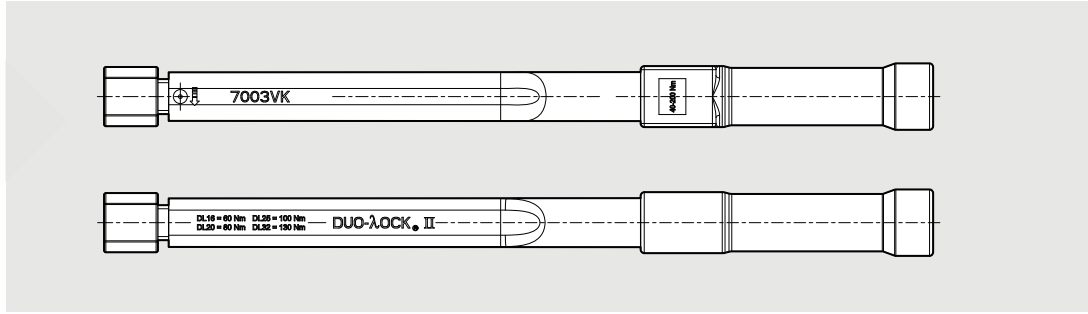
- For changing Duo-Lock tool heads directly in the lathe
- Changeable inserts for 7001 torque wrench
- Useable for Duo-Lock milling heads from DL10 – DL20
- Connecting size 9 x 12 mm

Insert

Order No.	Size
82.587.DL10	DL10
82.587.DL12	DL12
82.587.DL16	DL16
82.587.DL20	DL20

7003 TORQUE WRENCH DL16 – DL32

METRIC



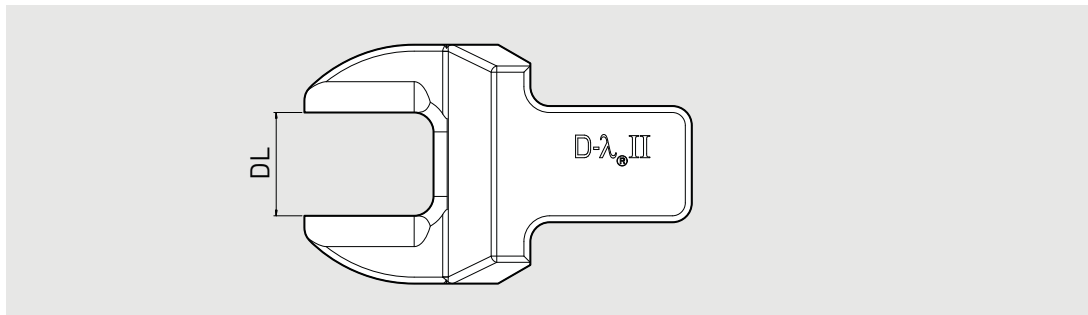
- 7003 torque wrench with changeover ratchet
- For changing Duo-Lock tool heads directly in the lathe
- Torque: 40 – 200 Nm
- Useable for Duo-Lock milling heads from DL16 – DL32
- Connecting size 14 x 18 mm
- Changeable to clockwise and counter clockwise

Torque wrench for Duo-Lock	Order No.
7003 Torque wrench 14 x 18 mm	82.588.00

Torque of Duo-Lock interface				
	DL16	DL20	DL25	DL32
Nm	60	80	100	130

DUO-LOCK® INSERTS FOR 7003 TORQUE WRENCH

METRIC



- For changing Duo-Lock tool heads directly in the lathe
- Changeable inserts for 7003 torque wrench
- Useable for Duo-Lock milling heads from DL16 – DL32
- Connecting size 14 x 18 mm

Insert	
Order No.	Size
82.588.DL16	DL16
82.588.DL20	DL20
82.588.DL25	DL25
82.588.DL32	DL32

HAIMER®

Tooling
Technology



HAIMER DUO-LOCK®

For fastest tool change and highest performance in
turning and milling applications