

NEW

EMUGE



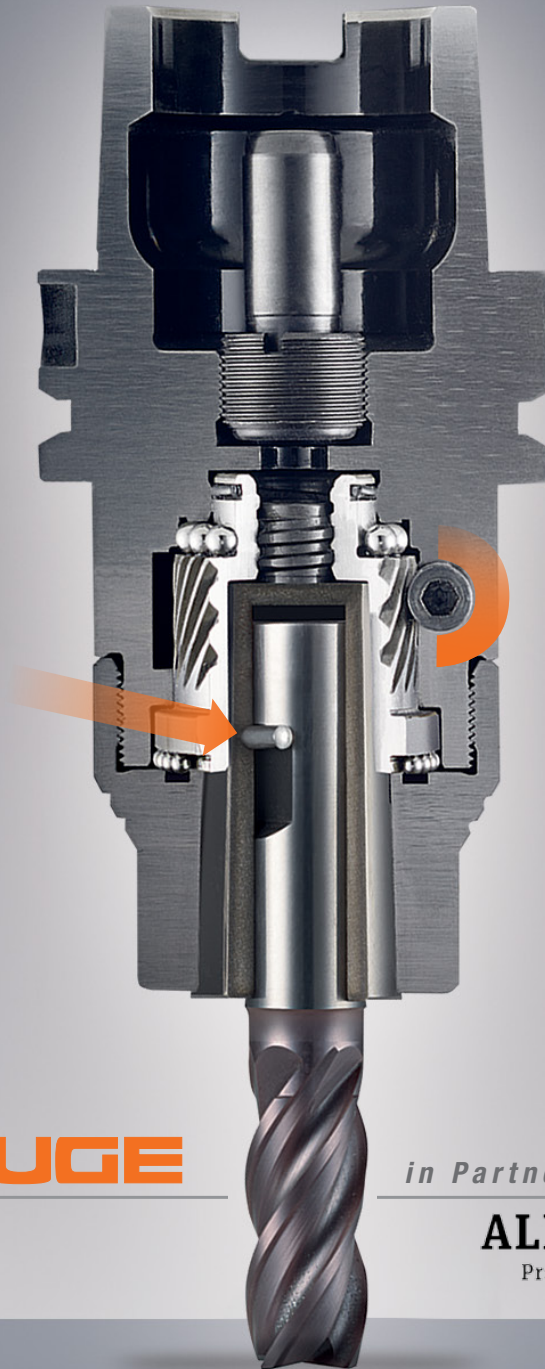
HIGH PRECISION
FPC MILLING/DRILLING CHUCKS

Introducing the Ultimate Precision Chuck

1. World's only chuck with 1:16 worm gear, a patented design delivering 3 tons of traction force.

2. Optimal Pull-Out Protection via optional Pin-Lock Collet System.

3. High rigidity. Patented design and body provides 100% holding power.



4. Mechanical drive actuated with a hex wrench. Simple design, highly accurate.

5. Maximum dampening. Collet-cone assembly absorbs virtually all vibration.

EMUGE

in Partnership with

ALBRECHT

Precision Chucks

New Emuge high precision/performance FPC Mill/Drill Chucks provide unprecedented rigidity, vibration dampening, concentricity, machining speed and tool life vs. conventional chuck technologies for milling and drilling applications. Available in a wide range of styles. Internal and peripheral coolant options, and MQL-adaptable.

Increase your machining speed and tool life to the highest possible levels.

Emuge FPC Chuck Advantages:

- **Reliability**
Extremely high transferable torque provides maximum process reliability. Transferred torque on a tool shank diameter of 20mm is 400 Nm.
- **More accurate**
With a 3 x D tool length, concentricity is $\leq 3 \mu\text{m}$, guaranteeing long tool life and quality surface finishes.
- **Longer tool life**
Special holder design reduces vibration, dramatically improving work piece surface finishes and providing exceptionally long tool life.
- **Fast tool change**
Simple, highly accurate design enables quick tool change in seconds, via hex wrench.

The Fastest Chuck in the West, east, north and south.

In a speed comparison with four chuck technologies, using a 20mm end mill in the same material, the Emuge FPC Chuck is the clear winner.

Winner by 00:25!

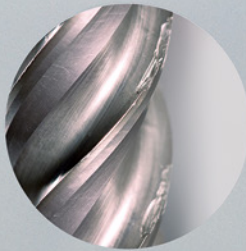


Emuge FPC Chucks provide the longest tool life and highest safety compared to conventional technologies.

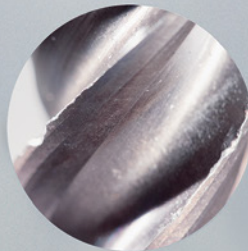
Emuge FPC Chucks – unbeatable performance, exceptionally long tool life.



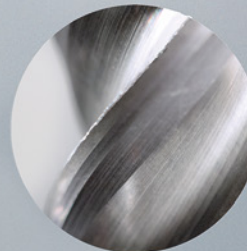
Weldon
One-sided wear



Hydraulic
Large nicks



Shrink Fit
Micro nicks



Emuge FPC Chuck
No nicks and minimal rounding

Test using 4-fluted end mill with identical material, machining speed and other parameters.

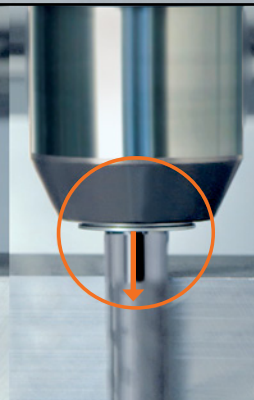
Emuge FPC Chucks – a Safe Bet.

Strong holding force via collet and taper assembly.



Weldon

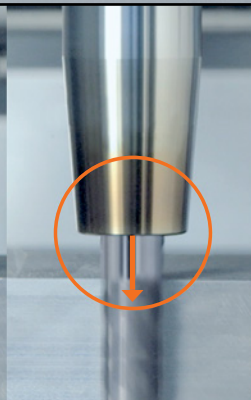
Safe clamping but minimal vibration dampening and poor runout.



Hydraulic

Possible pull-out

Soft clamping allows for higher deflection at high feed rates. No pull-out protection.



Shrink Fit

Possible pull-out

Clamping force dependent on tool shank tolerance. Limited vibration dampening.



Emuge FPC Chuck

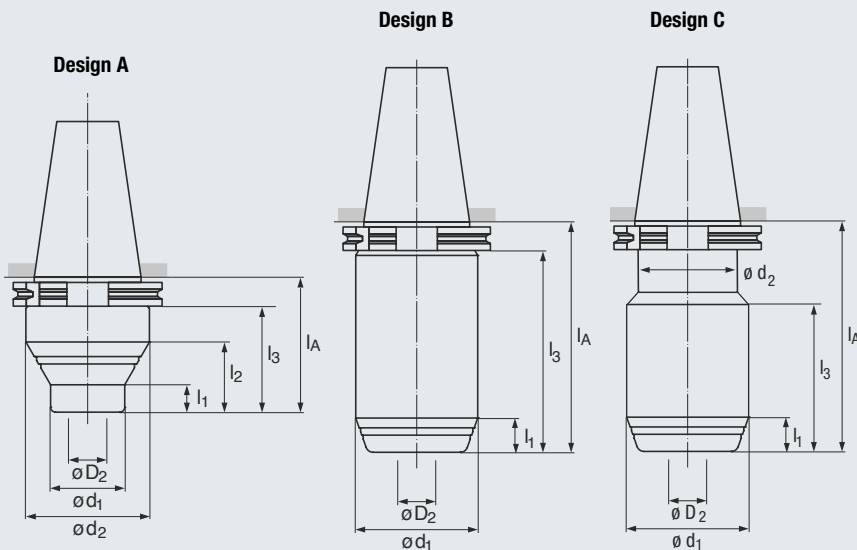
Strong clamping force via collet and taper assembly and Pin-Lock System **provides guaranteed holding power and pull-out protection.**

- Taper shank acc. ASME B5.50-2009
- Taper quality AT3
- Concentricity $\leq 3 \mu\text{m}$ at projection length of 3 x dia.
- Internal coolant supply

CAT

FPC $\leq 3 \mu\text{m}$

AT3 G2,5
20000min⁻¹



Icon descriptions (see page 13)

CAT 40

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	11	28	43	62	6494.401406*
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	61	78	93	112	6494.401411
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	85	103	129	148	6494.401414*
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	50	20	28	43	62	6494.402006*
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	50	69	78	93	112	6494.402011*
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	50	94	103	129	149	6494.402014
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	C	63	50	14	-	61	102	6494.402510

CAT 50

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	63	18	38	43	62	6494.502006
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	63	84	104	129	149	6494.502014
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	B	70	-	15	-	83	102	6494.502510

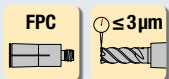
NOTE: Mechanical drive torque wrench must be set at **max. 12 Nm/8.85 ft-lbs**

FPC Collets and Accessories (see pages 10-13, please order separately)

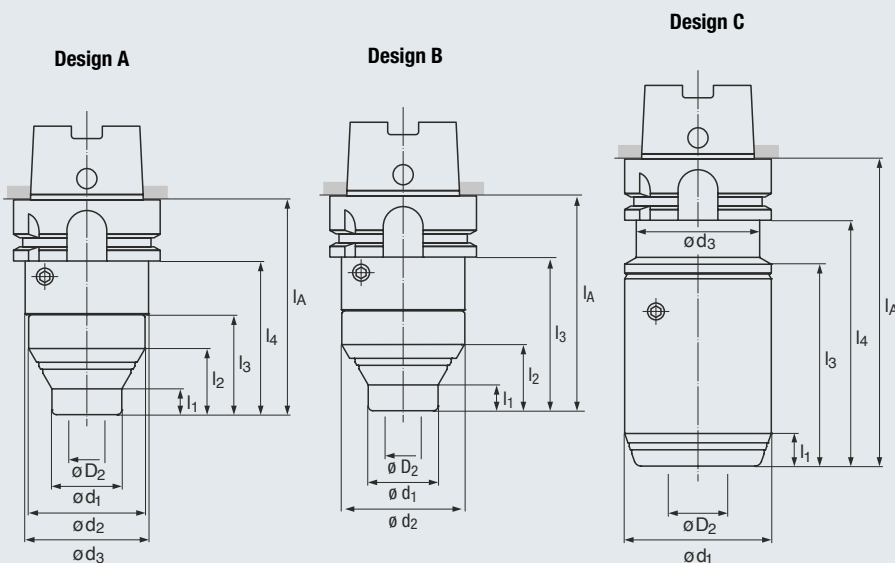
! * **Caution: tool does not have a safety zone**
Be sure to check for tool changer interference before using.

- Hollow taper shank acc. DIN 69893-1
- Concentricity $\leq 3 \mu\text{m}$ at projection length of 3 x dia.
- Internal coolant supply

HSK-A



G2.5
20000 min⁻¹



Icon descriptions (see page 13)

HSK-A63

SIZE	D2 (RANGE)	Design	d ₁	d ₂	d ₃	l ₁	l ₂	l ₃	l ₄	l _A	EDP no.	
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	53	11	28	43	66	92	6492.631409
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	53	61	78	93	116	142	6492.631414
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	53	85	103	129	152	178	6492.631417
FPC20	1/8" - 3/4"	2 mm - 20 mm	B	40	53	-	20	31	66	-	92	6492.632009
FPC20	1/8" - 3/4"	2 mm - 20 mm	B	40	53	-	69	81	116	-	142	6492.632014
FPC20	1/8" - 3/4"	2 mm - 20 mm	B	40	53	-	94	105	152	-	178	6492.632017
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	C	63	-	53	14	-	87	106	132	6492.632513

HSK-A80

SIZE	D2 (RANGE)	Design	d ₁	d ₂	d ₃	l ₁	l ₂	l ₃	l ₄	l _A	EDP no.	
FPC20	1/8" - 3/4"	2 mm - 20 mm	B	40	63	-	18	38	72	-	98	6492.802009
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	C	63	-	-	14	-	-	111	137	6492.802513

HSK-A100

SIZE	D2 (RANGE)	Design	d ₁	d ₂	d ₃	l ₁	l ₂	l ₃	l ₄	l _A	EDP no.	
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	63	70	18	38	43	71	100	6492.102010
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	63	70	84	104	129	157	186	6492.102018
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	C	70	-	-	15	-	-	110	139	6492.102514

HSK-F63

SIZE	D2 (RANGE)	Design	d ₁	d ₂	d ₃	l ₁	l ₂	l ₃	l ₄	l _A	EDP no.	
FPC20	1/8" - 3/4"	2 mm - 20 mm	B	40	53	-	20	31	66	-	92	6497.632009

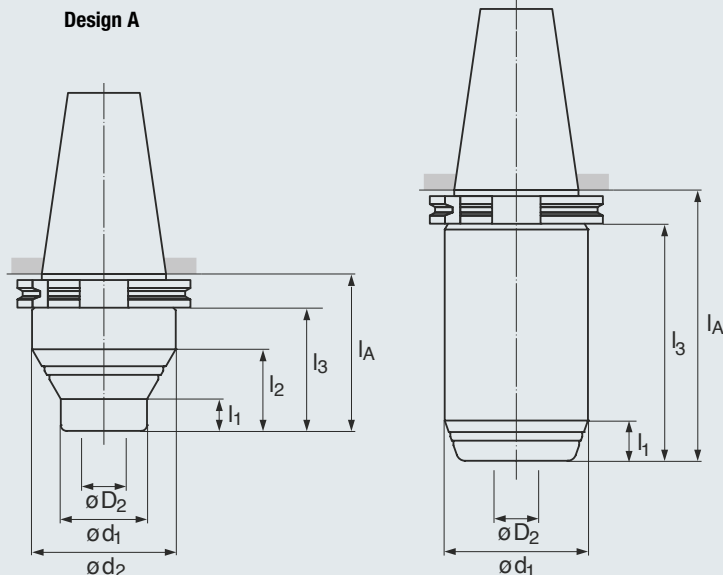
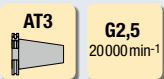
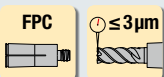
NOTE: Mechanical drive torque wrench must be set at **max.** 12 Nm/8.85 ft-lbs

FPC Collets and Accessories (see pages 10-13, please order separately)

Coolant tubes and assembly wrenches available upon request

- ISO taper shank acc. DIN ISO 7388-1 (formerly DIN 69871)
- Taper quality AT3
- Concentricity $\leq 3 \mu\text{m}$ at projection length of 3 x dia.
- Internal coolant supply

SK (ISO)



Icon descriptions (see page 13)

SK30

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	11	28	73	92	6491.301409
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	40	50	20	28	73	92	6491.302009

SK40

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	11	28	43	62	6491.401406
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	61	78	93	112	6491.401411
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	85	103	129	149	6491.401414
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	50	20	28	43	63	6491.402006
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	50	69	78	93	112	6491.402011
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	50	94	103	129	149	6491.402014
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	B	63	-	14	-	83	102	6491.402510*

SK50

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	63	18	38	43	62	6491.502006
FPC20	1/8" - 3/4"	2 mm - 20 mm	A	40	63	84	104	129	149	6491.502014
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	B	70	-	15	-	83	102	6491.502510

NOTE: Mechanical drive torque wrench must be set at **max. 12 Nm/8.85 ft-lbs**

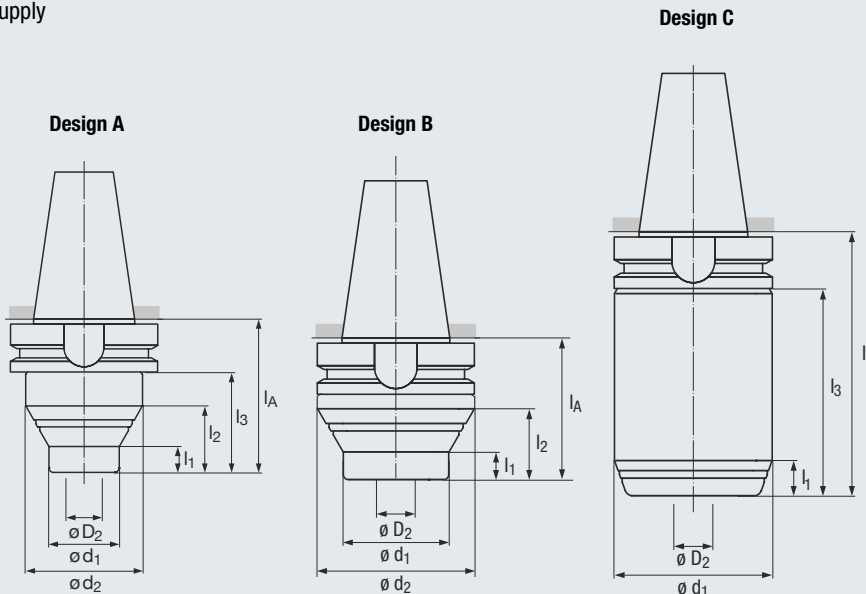
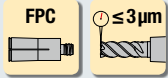
FPC Collets and Accessories (see pages 10-13, please order separately)

Pull studs available upon request

⚠ * Caution: tool does not have a safety zone
Be sure to check for tool changer interference before using.

- ISO taper shank acc. DIN ISO 7388-2 (formerly JIS B 6339/MAS 403 BT)
- Taper quality AT3
- Concentricity $\leq 3 \mu\text{m}$ at projection length of 3 x dia.
- Internal coolant supply

BT



Icon descriptions (see page 13)

BT30

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.
FPC14	1/8" - 9/16" 2 mm - 14 mm	A	30	53	11	28	56	82	6493.301408
FPC20	1/8" - 3/4" 2 mm - 20 mm	A	40	53	20	31	56	82	6493.302008

BT40

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.
FPC14	1/8" - 9/16" 2 mm - 14 mm	A	30	50	11	28	43	70	6493.401407
FPC14	1/8" - 9/16" 2 mm - 14 mm	A	30	50	61	78	93	120	6493.401412
FPC14	1/8" - 9/16" 2 mm - 14 mm	A	30	50	85	103	129	156	6493.401415
FPC20	1/8" - 3/4" 2 mm - 20 mm	B	40	63	18	38	-	70	6493.402007
FPC20	1/8" - 3/4" 2 mm - 20 mm	B	40	63	48	68	-	120	6493.402012
FPC20	1/8" - 3/4" 2 mm - 20 mm	B	40	63	84	104	-	156	6493.402015
FPC25	5/8" - 1 1/4" 16 mm - 32 mm	C	63	-	14	-	-	110	6493.402511

BT50

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.
FPC20	1/8" - 3/4" 2 mm - 20 mm	A	40	63	18	38	43	81	6493.502008
FPC20	1/8" - 3/4" 2 mm - 20 mm	A	40	63	84	104	129	167	6493.502016
FPC25	5/8" - 1 1/4" 16 mm - 32 mm	C	70	-	15	-	83	121	6493.502512

NOTE: Mechanical drive torque wrench must be set at **max. 12 Nm/8.85 ft-lbs**

FPC Collets and Accessories (see pages 10-13, please order separately)

Pull studs available upon request

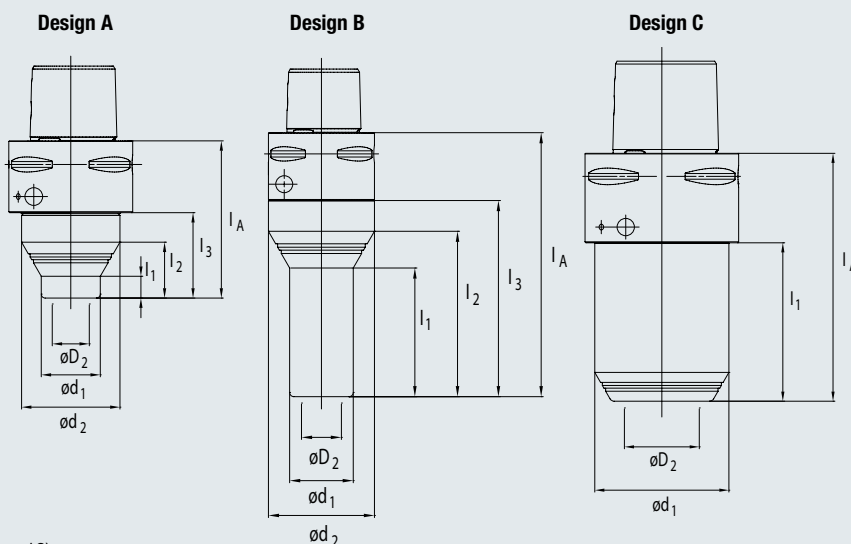
- Polygon shank acc. ISO 26623-1
- Concentricity $\leq 3 \mu\text{m}$ at projection length of 3 x dia.
- Internal coolant supply

CAPTO

FPC

$\leq 3 \mu\text{m}$

G2,5
20 000 min⁻¹



Icon descriptions (see page 13)



C5

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	61	78	-	125	6496.C51412
FPC20	1/8" - 3/4"	2 mm - 14 mm	B	40	50	20	28	-	78	6496.C52007

C6

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	11	28	43	80	6496.C61408
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	61	78	93	130	6496.C61413
FPC14	1/8" - 9/16"	2 mm - 14 mm	A	30	50	85	103	129	166	6496.C61416
FPC20	1/8" - 3/4"	2 mm - 14 mm	B	40	63	18	38	-	80	6496.C62008
FPC20	1/8" - 3/4"	2 mm - 14 mm	B	40	63	48	68	-	130	6496.C62013
FPC20	1/8" - 3/4"	2 mm - 14 mm	B	40	63	84	104	-	166	6496.C62016
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	C	63	-	-	-	-	119	6496.C62511

C8

SIZE	D2 (RANGE)	Design	d ₁	d ₂	l ₁	l ₂	l ₃	l _A	EDP no.	
FPC20	1/8" - 3/4"	2 mm - 14 mm	B	40	63	18	38	43	90	6496.C82009
FPC20	1/8" - 3/4"	2 mm - 14 mm	B	40	63	48	68	93	140	6496.C82014
FPC25	5/8" - 1 1/4"	16 mm - 32 mm	C	70	-	83	-	-	129	6496.C82512

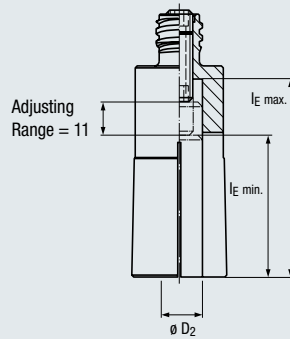
NOTE: Mechanical drive torque wrench must be set at **max.** 12 Nm/8.85 ft-lbs

FPC Collets and Accessories (see pages 10-13, please order separately)

Pull studs available upon request

- Length stop adjustable from both sides
- Standard version for coolant supply via slots in the collet
- Sealed version for tools with internal coolant supply

FPC



For accessories see page 13

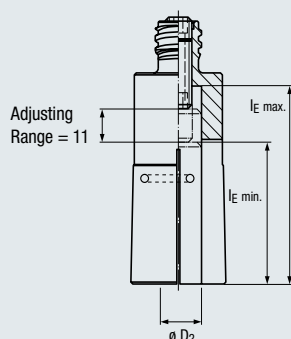
INCH					Standard	Sealed
SIZE	D ₂	l _E min	l _E max	Adjusting range	EDP no.	EDP no.
FPC14	1/8"	17	48	11	6638.140125	6639.140125
	3/16"	17	48	11	6638.140188	6639.140188
	1/4"	25	48	11	6638.140250	6639.140250
	5/16"	25	48	11	6638.140313	6639.140313
	3/8"	29	48	11	6638.140375	6639.140375
	7/16"	34	48	11	6638.140438	6639.140438
	1/2"	34	48	11	6638.140500	6639.140500
	9/16"	34	48	11	6638.140563	6639.140563
FPC20	1/8"	17	48	11	6638.200125	6639.200125
	3/16"	17	48	11	6638.200188	6639.200188
	1/4"	25	48	11	6638.200250	6639.200250
	5/16"	25	48	11	6638.200313	6639.200313
	3/8"	29	48	11	6638.200375	6639.200375
	7/16"	34	48	11	6638.200438	6639.200438
	1/2"	34	48	11	6638.200500	6639.200500
	9/16"	34	48	11	6638.200563	6639.200563
	5/8"	37	48	11	6638.200625	6639.200625
	11/16"	37	48	11	6638.200688	6639.200688
	3/4"	39	48	11	6638.200750	6639.200750
FPC25	5/8"	37	60	11	6638.250625	6639.250625
	3/4"	39	60	11	6638.250750	6639.250750
	1"	45	60	11	6638.251000	6639.251000
	1 1/4"	48	60	11	6638.251250	6639.251250
METRIC						
FPC14	2	17	48	11	6638.1402	6639.1402
	3	17	48	11	6638.1403	6639.1403
	4	17	48	11	6638.1404	6639.1404
	5	17	48	11	6638.1405	6639.1405
	6	25	48	11	6638.1406	6639.1406
	7	25	48	11	6638.1407	6639.1407
	8	25	48	11	6638.1408	6639.1408
	9	29	48	11	6638.1409	6639.1409
	10	29	48	11	6638.1410	6639.1410
	11	34	48	11	6638.1411	6639.1411
	12	34	48	11	6638.1412	6639.1412
	14	34	48	11	6638.1414	6639.1414
FPC20	2	17	48	11	6638.2002	6639.2002
	3	17	48	11	6638.2003	6639.2003
	4	17	48	11	6638.2004	6639.2004
	5	17	48	11	6638.2005	6639.2005
	6	25	48	11	6638.2006	6639.2006
	8	25	48	11	6638.2008	6639.2008
	10	29	48	11	6638.2010	6639.2010
	11	34	48	11	6638.2011	6639.2011
	12	34	48	11	6638.2012	6639.2012
	14	34	48	11	6638.2014	6639.2014
	15	37	48	11	6638.2015	6639.2015
	16	37	48	11	6638.2016	6639.2016
18	37	48	11	6638.2018	6639.2018	
20	39	48	11	6638.2020	6639.2020	
FPC25	16	37	60	11	6638.2516	6639.2516
	18	37	60	11	6638.2518	6639.2518
	20	39	60	11	6638.2520	6639.2520
	22	39	60	11	6638.2522	6639.2522
	25	45	60	11	6638.2525	6639.2525
	32	48	60	11	6638.2532	6639.2532

Minimum quantity lubrication (1-channel or 2-channel MQL systems) possible by exchanging the length stop, available on request

l_E min. = Minimum clamping length of the tool with length stop
 l_E max. = Maximum clamping length of the tool without length stop

- Use with straight shank standard tools according to DIN 6535 HB or DIN 1835 B (with Weldon flat)
- Available for FPC20 and FPC25 Chucks
- Standard version for coolant supply via slots in the collet
- Sealed version for tools with internal coolant supply
- Includes 3 pins

FPC



PIN-LOCK COLLETS INCH					Standard	Sealed
SIZE	D ₂	l _E min	l _E max	Adjusting range	EDP no.	EDP no.
FPC20	1/2"	34	48	11	6637.200500	6633.200500
	5/8"	37	48	11	6637.200625	6633.200625
FPC25	3/4"	39	60	11	6637.250750	6633.250750
	1"	45	60	11	6637.251000	6633.251000

PIN-LOCK COLLETS METRIC					EDP no.	EDP no.
SIZE	D ₂	l _E min	l _E max	Adjusting range	EDP no.	EDP no.
FPC20	6	25	48	11	6637.2006	6633.2006
	8	25	48	11	6637.2008	6633.2008
	10	29	48	11	6637.2010	6633.2010
	12	34	48	11	6637.2012	6633.2012
	14	34	48	11	6637.2014	6633.2014
	16	37	48	11	6637.2016	6633.2016
	18	37	48	11	6637.2018	6633.2018
FPC25	16	37	60	11	6637.2516	6633.2516
	18	37	60	11	6637.2518	6633.2518
	20	39	60	11	6637.2520	6633.2520
	22	39	60	11	6637.2522	6633.2522
	25	45	60	11	6637.2525	6633.2525

Pin-Lock set includes:

- 1 collet
- 3 pins
- 1 pin setter
- 1 break away torque driver w/hex wrench



PIN-LOCK SETS INCH		Standard	Sealed
SIZE	D ₂	EDP no.	EDP no.
FPC20	1/2"	6641.200500	6644.200500
	5/8"	6641.200625	6644.200625
FPC25	3/4"	6641.250750	6644.250750
	1"	6641.251000	6644.251000

PIN-LOCK SETS METRIC		
SIZE	D ₂	EDP no.
FPC20	6	6641.2006
	8	6641.2008
	10	6641.2010
	12	6641.2012
	14	6641.2014
	16	6641.2016
	18	6641.2018
FPC25	16	6641.2516
	18	6641.2518
	20	6641.2520
	22	6641.2522
	25	6641.2525

SPARE PINS		
SIZE	D ₂	EDP no.
FPC20	1/2" 6mm-14mm	6665.041
	5/8" 16mm	6665.040
	18mm	6665.044
FPC25	3/4" 1mm-20mm	6665.043
	1" 22mm-25mm	6665.042

Minimum quantity lubrication (1-channel or 2-channel MQL systems) possible by exchanging the length stop, available on request

l_E min. = Minimum clamping length of the tool with length stop

l_E max. = Maximum clamping length of the tool without length stop

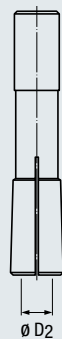
NOTE: set length stop to 1Nm/.7376 ft.-lbs.

FMC Collets

- Standard version for coolant supply via slots in the collet
- Sealed version for tools with internal coolant supply

FMC

For accessories see page 13



Standard

Sealed

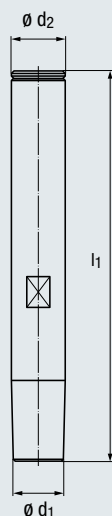
$\varnothing D_2$		EDP no.	EDP no.
[inch]	1/8"	6648.060125	6649.060125
	3/16"	6648.060188	6649.060188
	1/4"	6648.060250	6649.060250
[mm]	1	6648.0601	6649.0601
	2	6648.0602	6649.0602
	3	6648.0603	6649.0603
	4	6648.0604	6649.0604
	5	6648.0605	6649.0605
	6	6648.0606	6649.0606

FMC Collet Extensions

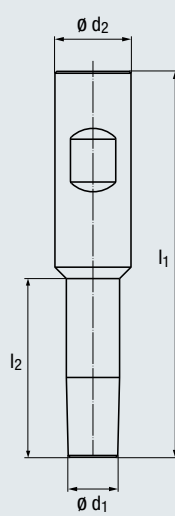
- Straight shank acc. DIN6535
- Concentricity <math>< 8 \mu\text{m}</math>
- Internal coolant supply

FMC

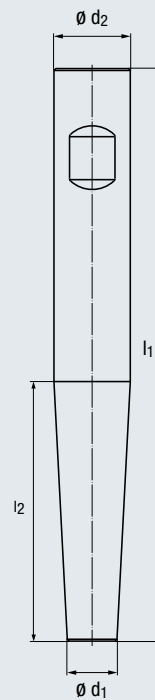
Design A



Design B



Design C

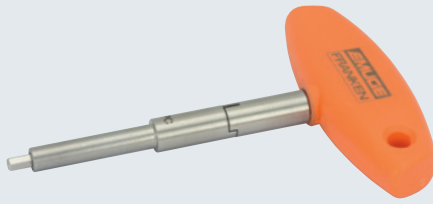


l_1	Design	$\varnothing d_1$	l_2	$\varnothing d_2$ h6	Shank design	EDP no.	EDP no.
100	A	13	—	14	DIN 6535 HA	6495.14100A	
150	A	13	—	14	DIN 6535 HA	6495.14150A	
190	A	13	—	14	DIN 6535 HA	6495.14190A	
100	B	13	45	20	DIN 6535 HB		6495.14100B
150	C	13	67	20	DIN 6535 HB		6495.14150B

A hexagon wrench is included in delivery (see page 13)

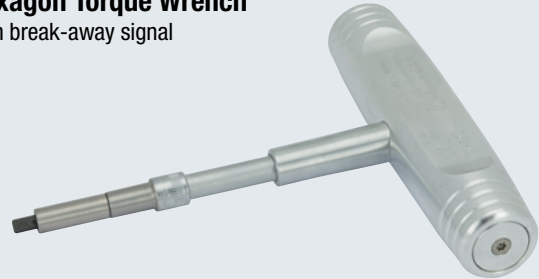
FPC Accessories

Hexagon Torque Wrench
with marking for torque applied



Width across flats	Torque	EDP no.
SW4 (4mm)	10 - 12 Nm	6665.010

Hexagon Torque Wrench
with break-away signal



Width across flats	Torque	EDP no.
SW4 (4mm)	12 Nm	6665-015

Taper Cleaners



For cleaning the inside cone of FPC Collet Holders

For size	EDP no.
FPC 14	6665.030
FPC 20	6665.031
FPC 25	6665.032

Spare Bit

with guidance tube



Width across flats	EDP no.
SW4 (4mm)	6665.018

FMC Accessories

Hexagon Torque Wrench for FMC Collet Extensions



Width across flats	L	Torque	EDP no.
4mm	220mm	1.5 - 3 Nm	6665.020

Icon Descriptions



For use with FPC Collets only



≤ 3µm (micron) runout at 3x diameter length



Balanced to G2.5, 20,000 RPM



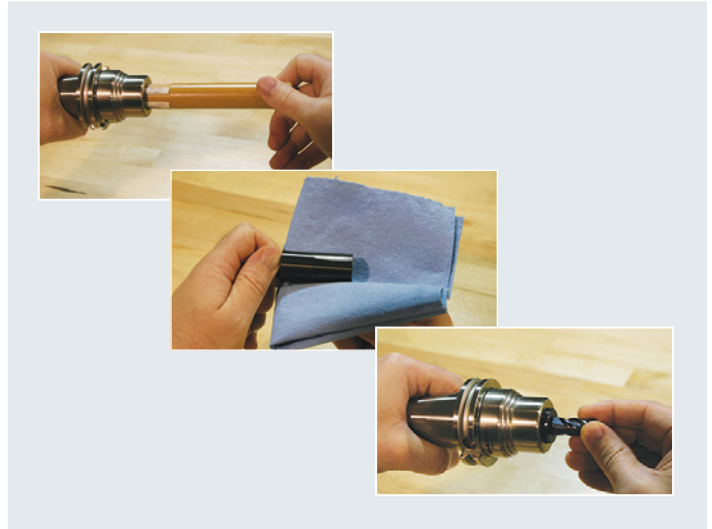
Taper quality AT3

FPC Chuck Operation

1. Inserting the collet:

Clean the inner taper of the FPC (for cleaning the inner cone we recommend our special taper wiper).

Manually screw the clean collet with the tool into the chuck until the collet connects with the taper. In order to achieve max. clamping forces we recommend to degrease tool shank, inner and outer collet cone as well as the inner cone of the FPC.



2. Clamping:

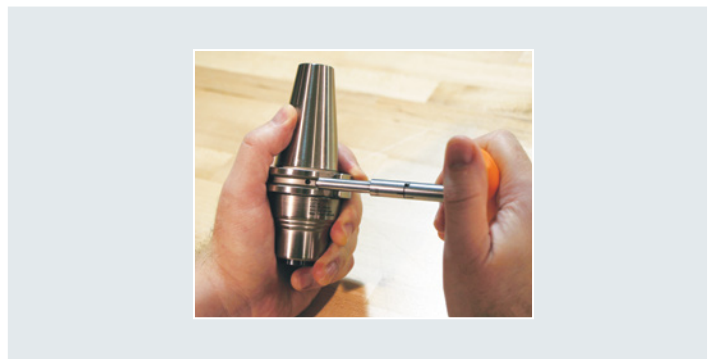
The clamping procedure starts by engaging the screw on the side of the FPC and rotating the hex key clockwise.

Caution: Insert the hex key as far as possible. Only use hex key with torque measurement. Max 12Nm / 8.85 ft-lbs. for torque.



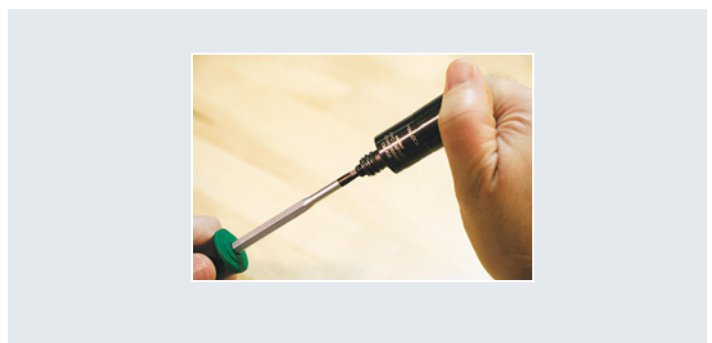
3. Loosening.

Loosen the collet by inserting the hex key and turning it counter clock-wise. Full torque will be applied. Turn until the collet can be unscrewed manually.



4. Length Stop

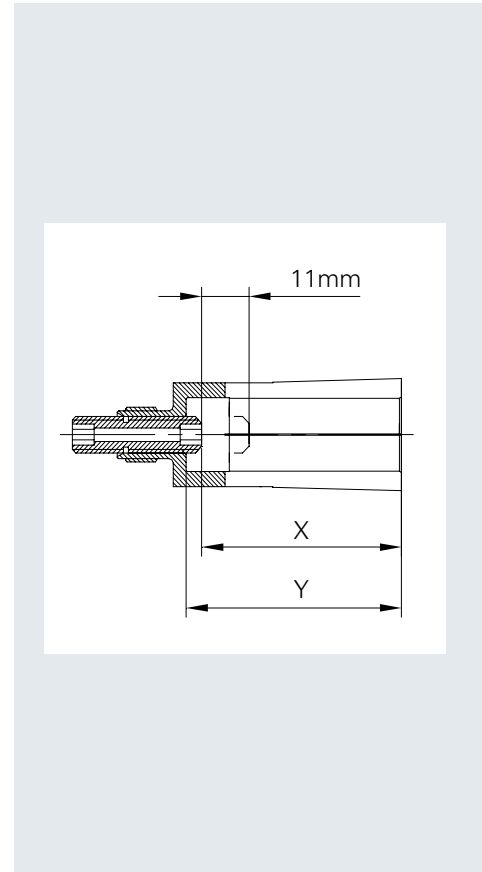
A length stop screw is located in the collet and can be adjusted with the hex key.



FPC Chuck Operation (continued)

5. Insertion depth of tool:

FPC type	Clamping Diameter/		X mm	Y mm
	mm	inch		
FPC14/FPC20	2 - 5	1/8"-3/16"	28	48
FPC14/FPC20	6	1/4"	36	
FPC14/FPC20	7-8.5	5/16"	36	
FPC14/FPC20	9	3/8"	40	
FPC14/FPC20	10		40	
FPC14/FPC20	11-14	7/16"-9/16"	45	
FPC20	15-18	5/8"-11/16"	48	
FPC20	20	3/4"	50	60
FPC25	16-18		48	
FPC25	20-22		50	
FPC25	25		56	
FPC25	32	1 1/4"	60	



FPC Pin-Lock Operation

1. Insert the tool positioned correctly



2. Insert pin fully into collet



3. Turn adjustment screw to max 1Nm/.7376 ft-lbs



EMUGE HIGH PERFORMANCE TOOLS



Ask about our
new line of
**High Performance
End Mills.**

Visit emuge.com
Request a free catalog.

EMUGE Corp. Technology Center

West Boylston, MA, USA



EMUGE Corp. is a wholly owned subsidiary of EMUGE-Werk Richard Glimpel GmbH & Co. KG (Lauf, Germany) that has been the product technology and performance leader in their field for nearly 100 years. Emuge manufactures an extensive line of taps, thread mills, end mills, drills, toolholders, clamping devices and other rotary cutting tools, over 100,000 items sold through distributors worldwide. Emuge also offers end-user technical support through a network of in-the-field engineers and in-house product specialists, all with extensive tooling and application experience.

EMUGE Corp.
1800 Century Drive, West Boylston, MA 01583
800-323-3013 • www.emuge.com