

# DHE

## Hydraulic expansion chuck



### Features

- Optimized for the machining of mold, automobile parts, and precision parts with high precision
- Improved machining surface roughness due to vibration-proof effect of hydraulic cylinder
- Decreased time to replace and workers' fatigue because tools can be removed by T-wrench
- Clamping range:  $\varnothing 6 \sim \varnothing 32$

Designation	<b>BT40</b>	—	<b>DHE</b>	—	<b>20</b>	—	<b>140</b>
	Spindle		Hydraulic Expansion Chuck		Tool Dia.		Length



### Features

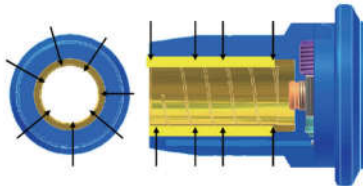
With high precision, this product extends the life of cutting tools by decreasing their abrasion and improves the machining surface roughness by reducing vibration.

- RUN OUT: Less than  $5\mu\text{m}$
- $L = 3 \times \varnothing D$
- Shank: Tolerance of  $\varnothing D$ : h6



### Hermetically sealed interior (durability)

- Prevents the infiltration of dust, cutting oil, and lubricating oil and chip etc. with complete sealing system in inner diameter part
- Maintains the clamping force and precision level for a long time

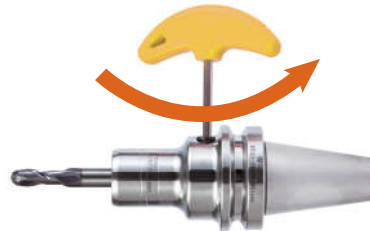


SHANK	Grade	Max.RPM
BT50, SK50, HSK100A	G6.3	8,000
BT40, SK40, HSK63A	G6.3	10,000
BT30, HSK50A, SK30	G6.3	15,000



### Tools can be removed using a T-wrench

- Clamping/Unclamping with simple/operation (convenience)
  - : Decreases the fatigue of workers
  - : Improves the operation rate of the machine



### Stable clamping force

Provides stable clamping force by fixing the space of holder and tool with hydraulic pressure



- C** Internal coolant system installed.
- C** Internal coolant system optional. (HSK Shank)

• BT: 60P ↗ HSK: 146P ↗ SK: 158P ↗



# BT-DHE

Hydraulic expansion chuck



MAS 403-BT	G6.3	15,000	5 $\mu$ m	C			
Shank	G value	Max RPM	Run-out	Coolant System	Milling	Reaming	Chamfering

Fig.1

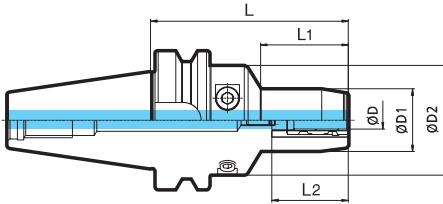
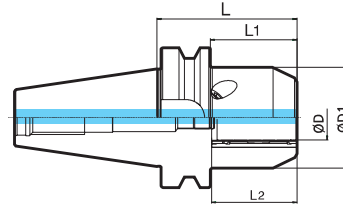


Fig.2



- For more information on the product features, see **Page 22**. 22P
  - For more information on the applicable collet, see **Page 62**. 62P
  - For more information on the related parts, see **Page 63**. 63P
  - For more information, see **Page 146** for HSK shank and see **Page 158** for SK shank. 146,158P
- **L2**: Depth of tool insertion (MIN.~MAX.)
- C** Internal coolant system installed.

BT50

Designation	ØD	L	ØD1	ØD2	L1	L2	ADJ SCREW	Fig.	Kg	Total Weight (Kg)
BT50-DHE6-90	6	90	29	50	34	30~39.8	M5	1	3.9	4.2
BT50-DHE6-140	6	140	29	50	40	30~39.8	M5	1	4.4	4.8
BT50-DHE8-90	8	90	31	50	34	30~39.8	M5	1	4.2	4.5
BT50-DHE8-140	8	140	31	50	40	30~39.8	M5	1	4.6	5
BT50-DHE10-90	10	90	33	50	34	35~44.8	M5	1	3.9	4.2
BT50-DHE10-140	10	140	33	50	34	35~44.8	M5	1	4.5	4.9
BT50-DHE12-90	12	90	35	50	34	41~50.8	M10	1	4.0	4.3
BT50-DHE12-140	12	140	35	50	34	41~50.8	M10	1	4.6	5
BT50-DHE14-90	14	90	36	50	34	43~52.8	M10	1	3.9	4.2
BT50-DHE14-140	14	140	36	50	34	43~52.8	M10	1	4.5	4.9
BT50-DHE16-90	16	90	40	50	34	46~55.8	M10	1	4.1	4.4
BT50-DHE16-140	16	140	40	50	34	46~55.8	M10	1	4.7	5.1
BT50-DHE18-90	18	90	42	50	40	49~58.8	M10	1	4.0	4.3
BT50-DHE18-140	18	140	42	50	45	49~58.8	M10	1	4.5	4.9
BT50-DHE20-90	20	90	44	50	34	49~58.8	M10	1	4.0	4.3
BT50-DHE20-140	20	140	44	50	47	49~58.8	M10	1	4.5	4.9
BT50-DHE25-90	25	90	66	-	52	58~67.8	M16	2	4.7	5
BT50-DHE32-90	32	90	72	-	52	58~67.8	M16	2	5.8	6.2

Feature

BT shank

S,ST shank

HSK shank

SK shank

NT shank

cBN/PCD

Other



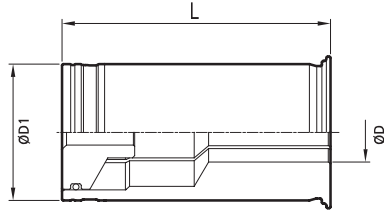


# DHC Collet (general & waterproof type)

DHE Collet (general type) / DHE Collet (waterproof type)

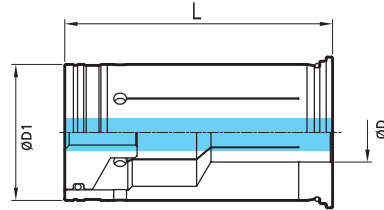


**Fig.1**



**C** This product does not support the internal coolant system.

**Fig.2**



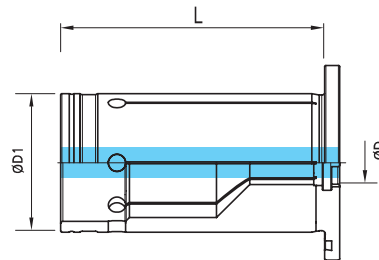
**C** Internal coolant system installed.

• Systems in other sizes are custom-made.

Designation (general type)	ØD	ØD1	L	Fig.	Kg
DHC12- 3,4,5,6,8	3,4,5,6,8	12	47	1	0.08
DHC20- 3,4,5,6,7,8,9,10,11,12,14,16	3,4,5,6,7,8,9,10,11,12,14,16	20	52	1	0.08
DHC32-6,8,10,12,14,16,18,19,20,25	6,8,10,12,14,16,18,19,20,25	32	63	1	0.08
Designation (waterproof type)	ØD	ØD1	L	Fig.	Kg
DHC12- 3(P),4(P),5(P),6(P),8(P)	3,4,5,6,8	12	47	2	0.08
DHC20- 3(P),4(P),5(P),6(P),7(P),8(P),9(P),10(P),11(P),12(P),14(P),16(P)	3,4,5,6,7,8,9,10,11,12,14,16	20	52	2	0.08
DHC32- 6(P),8(P),10(P),12(P),14(P),16(P),18(P),19(P),20(P),25(P)	6,8,10,12,14,16,18,19,20,25	32	63	2	0.08

# DHJ Collet (jet coolant)

DHJ JET Coolant collet

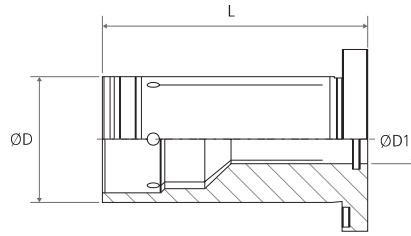


**C** Internal coolant system installed.

Designation	ØD	ØD1	L	Kg	Total Weight (Kg)
DHJ20-8	8	20	50	0.14	0.14
DHJ20-10	10	20	50	0.1	0.1
DHJ20-12	12	20	50	0.1	0.1
DHJ20-14	14	20	50	0.08	0.08
DHJ20-16	16	20	50	0.08	0.08

# DZC Collet

Zero fit collet






**C** This product does not support internal coolant system.

Designation	$\varnothing D$	$\varnothing D1$	L
DZC20-6	20	6	56.5
DZC20-8	20	8	56.5
DZC20-10	20	10	56.5
DZC20-12	20	12	56.5
DZC20-14	20	14	56.5
DZC20-16	20	16	56.5
DZC32-6	32	6	67.5
DZC32-8	32	8	67.5
DZC32-10	32	10	67.5
DZC32-12	32	12	67.5
DZC32-16	32	16	67.5
DZC32-20	32	20	67.5
DZC32-25	32	25	67.5

## DHE SPARE PART

Parts for hydraulic expansion chuck

Spare Part		Main Components			
Type	Images	Clamp bolt	Wrench	Type	Adjustable screw
Model No.				Model No.	
BT30 / SK30 / HSK50	DHE 6, 8, 10, 12	BTF1010	DHETW-5	DHE 6, 8, 10	DHE-M5 (ADJ)
	DHE 14, 16, 18, 20	BTF1010		DHE 12, 14, 16, 18, 20	DHE-M10 (ADJ)
BT40 / BT50 / SK40 / SK50 / HSK63A / HSK100A	DHE 6, 8, 10, 12, 14, 16, 18, 20	BTF1010	DHETW-6	DHE 25, 32	DHE-M16 (ADJ)
	DHE 25, 32	BTF1212-1.5		DHE 25, 32	DHE-M16 (ADJ)

Feature

BT shank

S,ST shank

HSK shank

SK shank

NT shank

cBN/PCD

Other