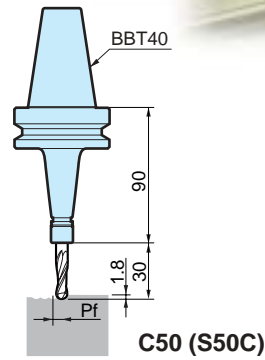
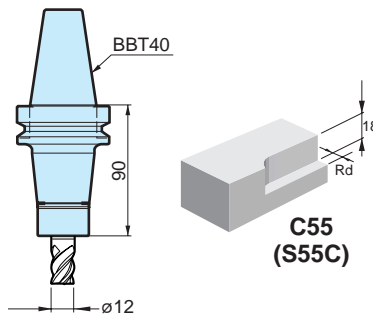
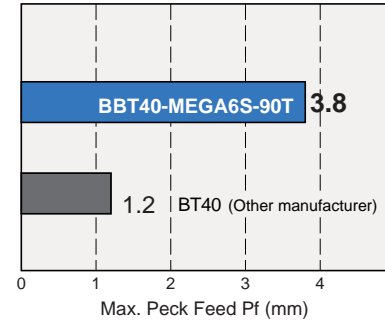


Comparison of the max. radial depth of cut.



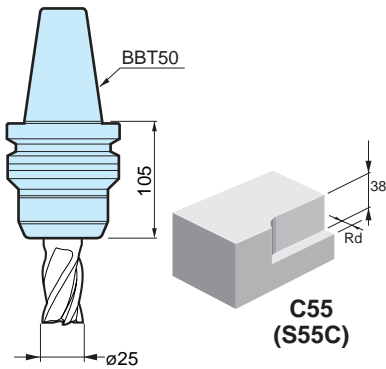
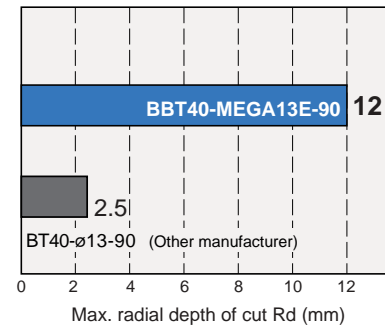
MEGA MICRO CHUCK

MACHINE TOOL	BBT40 (Vertical Machining Center)
TOOL HOLDER	BBT40-MEGA6S-90T BT40 (Other manufacturer)
CUTTER	ø6 2-Flute Carbide Ball End Mill
WORK MATERIAL	C50 (S50C)
SPINDLE SPEED	12,000 (min ⁻¹)
FEED RATE	720 (mm/min.) 0.03 (mm/tooth)



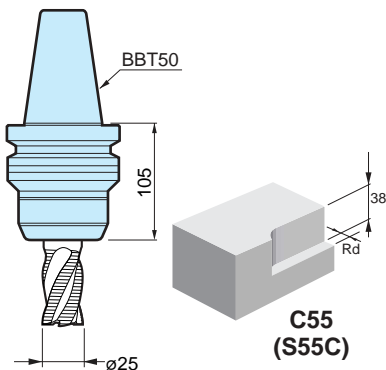
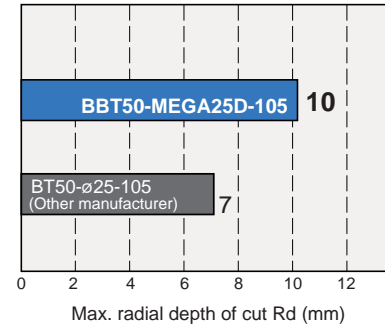
MEGA E CHUCK

MACHINE TOOL	BBT40 (Vertical Machining Center)
TOOL HOLDER	BBT40-MEGA13E-90 BT40-ø13-90 (Other manufacturer)
CUTTER	ø12 4-Flute Carbide End Mill
WORK MATERIAL	C55 (S55C)
SPINDLE SPEED	1,327 (min ⁻¹)
CUTTING SPEED	50 (m/min.) 425 (mm/min.)
FEED RATE	0.08 (mm/tooth)



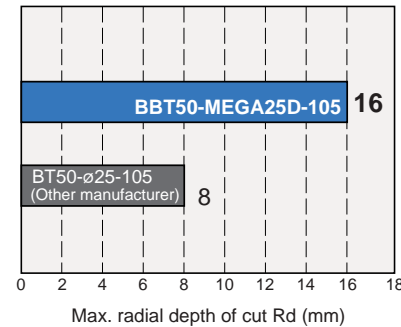
MEGA DOUBLE POWER CHUCK

MACHINE TOOL	BBT50 (Vertical Machining Center)
TOOL HOLDER	BBT50-MEGA25D-105 BT50-ø25-105 (Other manufacturer)
CUTTER	ø25 4-Flute Carbide End Mill
WORK MATERIAL	C55 (S55C)
SPINDLE SPEED	1,274 (min ⁻¹)
CUTTING SPEED	100 (m/min.) 510 (mm/min.)
FEED RATE	0.1 (mm/tooth)



MEGA DOUBLE POWER CHUCK

MACHINE TOOL	BBT50 (Vertical Machining Center)
TOOL HOLDER	BBT50-MEGA25D-105 BT50-ø25-105 (Other manufacturer)
CUTTER	ø25 4-Flute Roughing end Mill
WORK MATERIAL	C55 (S55C)
SPINDLE SPEED	701 (min ⁻¹)
CUTTING SPEED	55(m/min.) 420 (mm/min.)
FEED RATE	0.15 (mm/tooth)



High Precision Toolholders

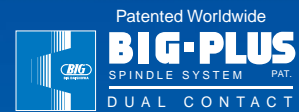
MEGA / NBS / HMC

BIG DAISHOWA SEIKI CO LTD

CATALOG No. EXm400-2



"Reduce Costs by maximizing tool life with High Precision toolholders"



In Accordance To DIN 69871



BIG DAISHOWA SEIKI CO LTD

Takaramachi 5-2, Higashiosakashi
Osaka 579-8025 JAPAN
Phone : (+81)-72-982-8277 Fax : (+81)-72-982-8370
http://www.big-daishowa.com E-mail: export@big-net.ne.jp



JQA-QMA11602
AWAJI No.1 Factory
JQA-QM3913
FA Dept.

CATALOG No.EXm400-2-0807-1
Subject to technical changes by further developments.

For High speed
MEGA CHUCK SERIES PAT.

Clamping Range : \varnothing 0.45 - \varnothing 42

BIG-PLUS
SPINDLE SYSTEM PAT.
DUAL CONTACT

Patented; USA, Canada, Germany, UK, France, Italy and South Korea

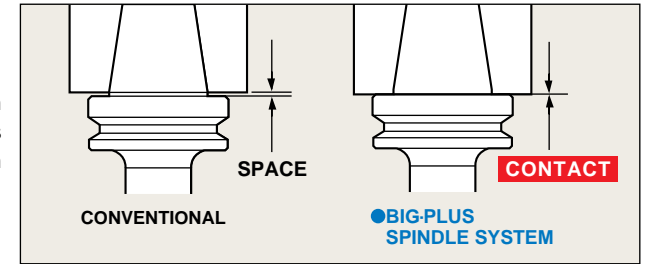
MEGA CHUCK series optimizes high speed and precise cutting with drills and endmills.

Depending on applications, ideal chuck can be selected to enhance cutting performance.

BIG-PLUS holders can be used in machining centers with conventional spindles.

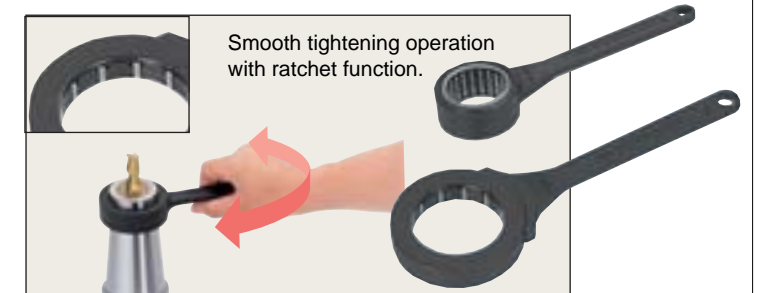
DUAL CONTACT BIG-PLUS SPINDLE SYSTEM AS STANDARD

Dual Contact Spindle System assures the highest rigidity possible in high speed and difficult metal machining applications. Known as BIG-PLUS, this system offers simultaneous dual contact between the machine spindle and toolholder flange face, as well as the machine spindle taper and the toolholder taper shank.



EASY AND FIRM CLAMPING WITH THE MEGA WRENCH

Mega Wrench has unique design of one way clutch system with a roller bearing and a ratchet function and is capable of safely and evenly applying force on the entire nut periphery.



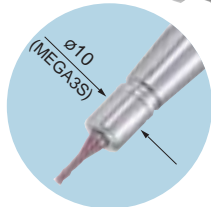
MAX. 35,000min⁻¹

For micro drills & endmills

MEGA MICRO CHUCK

Clamping Range : \varnothing 0.45 - \varnothing 6.05

P7



"Taper Type" For Micro End Milling

Super slim and taper type of Mega Micro Chuck is suitable for micro endmills.

MEGA MICRO COLLET

Interval of clamping dia. is 0.1mm. Just fitting for micro cutting tools.

Collet Class	Max. Runout		Within 1 μ m	Within 3 μ m
	At nose	At end of test bar		
AA	Within 1 μ m	Within 3 μ m	Within 1 μ m	Within 3 μ m

For endmills

MEGA E CHUCK PAT.

Clamping Range : \varnothing 3- \varnothing 12

MAX. 30,000min⁻¹

P15



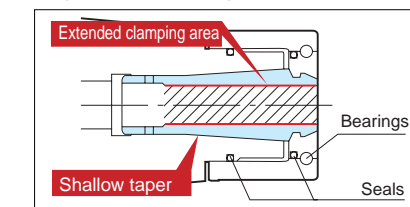
Max. Coolant Pressure 7MPa

Slit-Through Coolant

Coolant is securely directed to cutting tool through slits in a collet, even at high spindle speeds. Tool life and surface finish is improved as a result of efficient chip evacuation. Rubber seals are provided within the nut and body in order to prevent coolant leakage.



High Clamping Force



MEGA E COLLET

Collet Class	Max. Runout	
	At nose	At end of test bar
AA	Within 1 μ m	Within 3 μ m

MAX. 35,000min⁻¹

For endmills, drills, taps, reamers, etc.

MEGA NEW BABY CHUCK PAT.

Clamping Range : \varnothing 0.25- \varnothing 20

P9



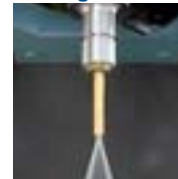
For High Pressure Coolant Supply

Nut with seal for Mega New Baby Chuck. Performance of the seal improves with higher coolant pressure.

MEGA PERFECT SEAL PAT.



2way coolant Through Tools



Jet Through



MAX. 25,000min⁻¹

For endmills

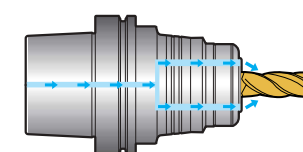
MEGA DOUBLE POWER CHUCK PAT.

Clamping Range : \varnothing 16- \varnothing 42

P17



Effective Coolant Supply



- For improved surface finish
- Extended tool life
- Smoother chip evacuation
- Cooling & lubricating of tools

Coolant-through Nozzles



Complete fit of nut and body achieves high rigidity as an integral body.

In the case of a conventional milling chuck, an inner taper of nut contacts only with body when tightened. However, there is still a gap between nut and body. Large fit diameter of nut provides higher rigidity as if the chuck and nut were an integral body. This superior rigidity assures heavy cutting without chatter.



High precision collet, close to submicron

NEW BABY COLLET



Collet Class	Max. Runout	
	At nose	At end of test bar
AA	Within 1 μ m	Within 3 μ m

High precision collet chuck system

NEW BABY CHUCK PAT.

Clamping Range : \varnothing 0.25 - \varnothing 20



P19

Highest Precision For Small drills and endmills

Specifically designed and manufactured to achieve the highest precision.

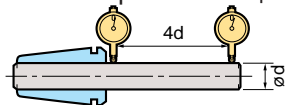
High precision collet, close to submicron

NEW BABY COLLET



- Collets for **BIG** New Baby Chuck are specially processed to achieve a super high precision never before possible.
- Each collet is inspected and double checked to meet maximum runout tolerance permitted, i.e., 100% check & re-check.

● Runout of collet
Within $1\mu\text{m}$ Within $3\mu\text{m}$



Collet Class	Max. Runout	
	At nose	At end of test bar
AA	Within $1\mu\text{m}$	Within $3\mu\text{m}$

For high pressure coolant supply

Max. Coolant Pressure 7MPa

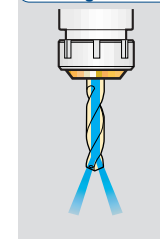


BABY PERFECT SEAL PAT.

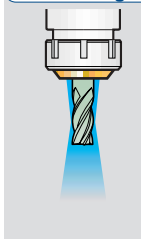
P21

2way coolant

Through Tools

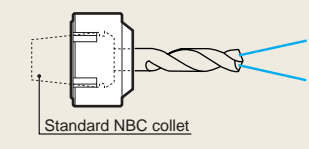


Jet Through

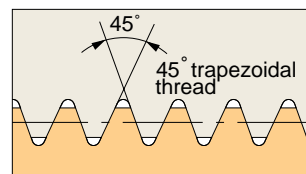


Coolant supply through tool tip

The sealed nut prevents coolant from leaking through collet and directs coolant through a tool to its tip.



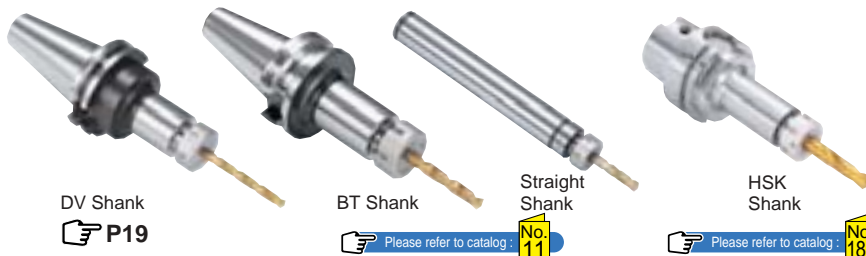
The nut is a key to achieve the highest precision of a collet



- A 45° trapezoidal thread offers less friction and better alignment to the center when clamping a collet.
- Since the threads greatly influences accuracy, they are finished after heat treatment. Therefore, bad influence from clamping action is eliminated, which enhance clamping performance.
- A nut incorporates a thrust bearing with steel balls that prevents stress to a collet and allows a smooth clamping force to a collet.

Over 250 types of shanks are available

- A variety of steep taper shanks and straight shanks are available. Very short and extra long projection lengths are also available.

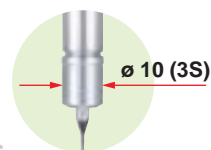


MEGA MICRO CHUCK SERIES

Ultra slim nut (\varnothing 10) and collet that are compact in size and precise in accuracy.

Tiny & Precise Body dia. \varnothing 10

P7



High precision design for heavy cutting

NEW Hi-POWER MILLING CHUCK

Clamping Range : \varnothing 20 - \varnothing 42



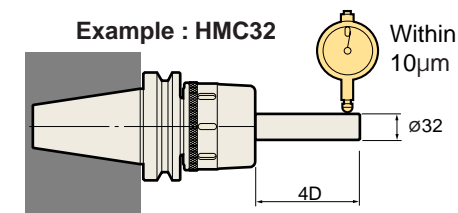
P22

Powerful Clamping For Heavy Cutting

Fine slots and ball bearing assure powerful and precise clamping.

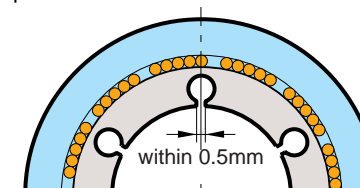
Precise concentricity

Concentricity is assured by the integral design and clamping by mechanical compression of the annular section by the rolling bearing system. All models are inspected and double checked to meet maximum runout tolerance permitted. (within 10μ at 4D).



Secure and reliable slot design

Fine and narrow slots make a clamping part deform properly. The clamping part surely clamps a cutting tool's shank even for heavy cutting. The slots also eliminate the oil that spoils clamping torque.

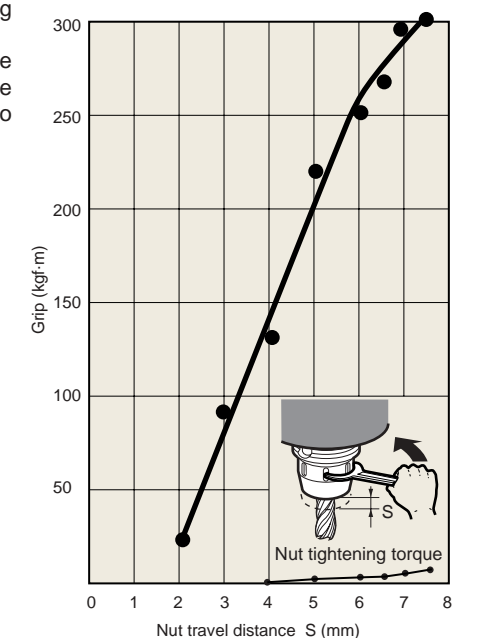


Fine Slots

High clamping torque

Tightening torque is magnified by tightening a nut with original design of a roller bearing as in the figure shown below. When a roller bearing smoothly brings a nut downwards, a wall on a clamping part of chuck elastically deforms and high clamping force is achieved on a cutting tool's shank. Furthermore, the wall is designed to be thick enough to prevent chattering.

Gripping power of NEW HI-POWER MILLING CHUCK(HMC32)

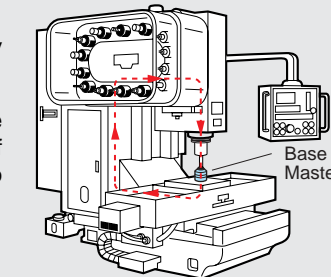


BASE MASTER

Ultra sensitive detection of 1μ reduces set-up time.



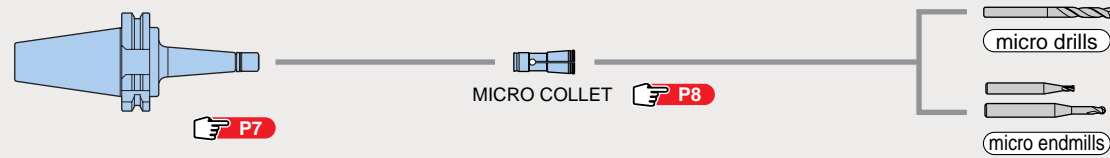
- Compact design for fast and easy handling.
- Integrated circuit assures dependable lighting. Safety over-travel of sensor plate prevents damage to tools.



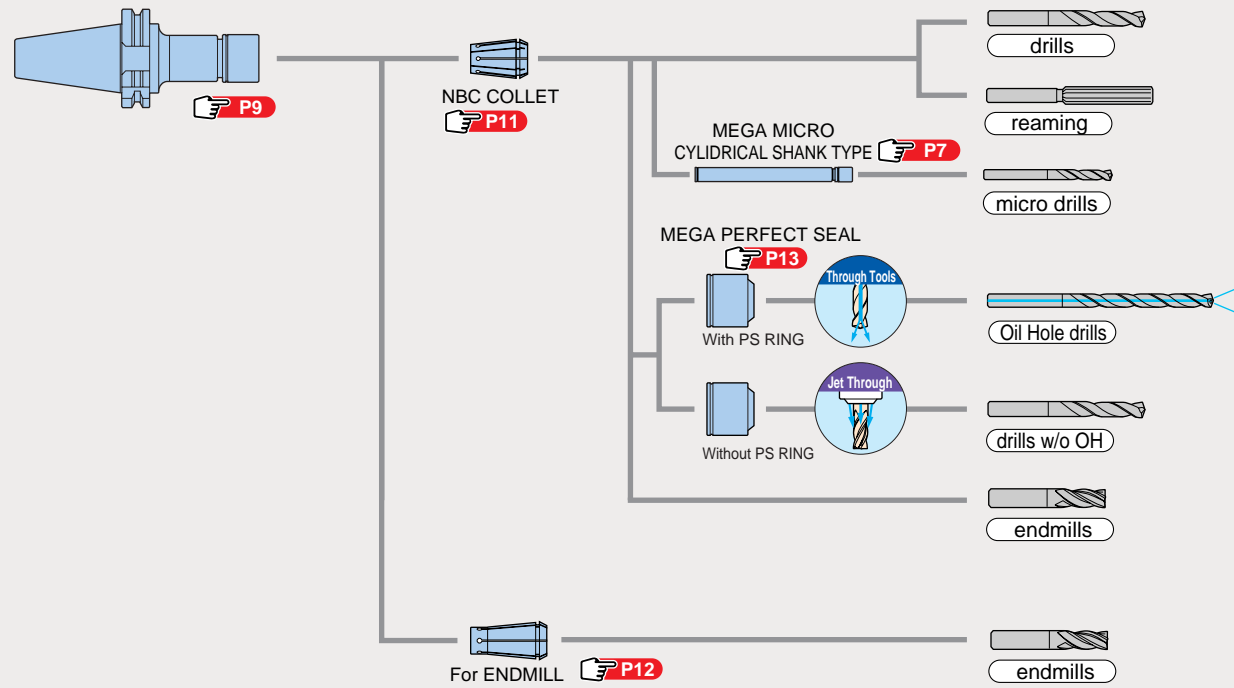
PRINCIPLE

When BASE MASTER BM-50 is mounted on a machine table, it becomes positive pole (anode). When a tool, which is itself negative pole (cathode), touches a sensor plate of BM-50, an electrical circuit is established and LED lamp turns on.

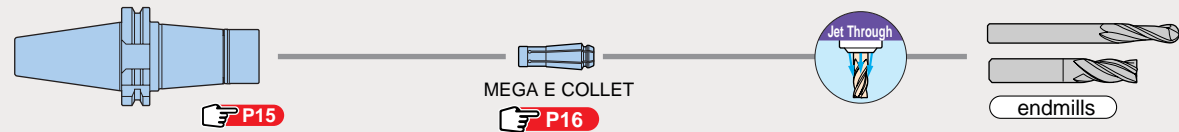
MEGA MICRO CHUCK MAX.35,000min⁻¹ Clamping Range : $\varnothing 0.45 - \varnothing 6.05$



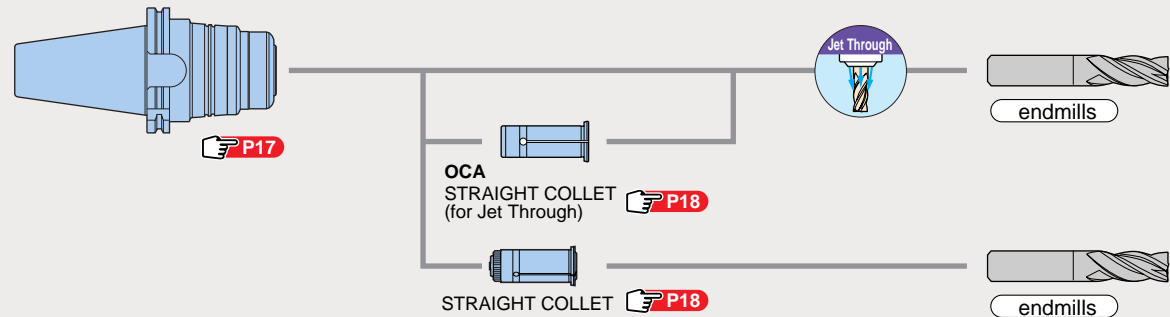
MEGA NEW BABY CHUCK PAT. MAX.35,000min⁻¹ Clamping Range : $\varnothing 0.25 - \varnothing 20$



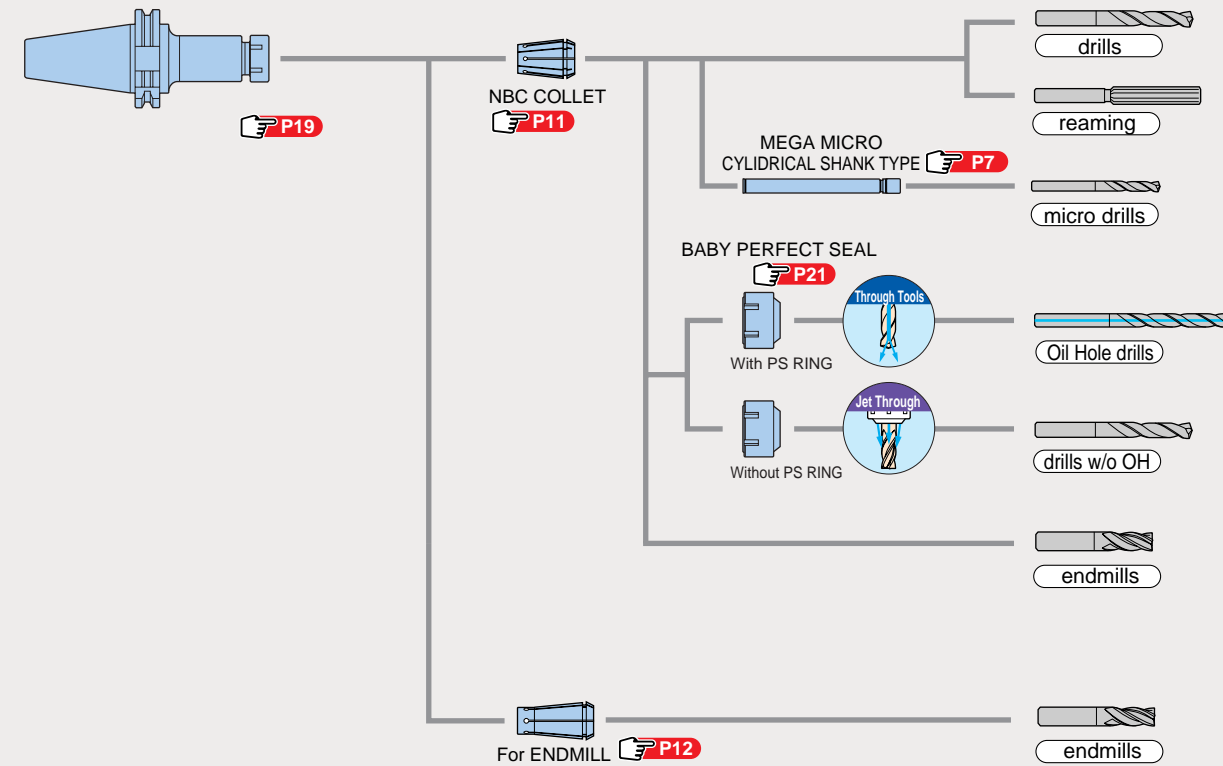
MEGA E CHUCK PAT. MAX.30,000min⁻¹ Clamping Range : $\varnothing 3 - \varnothing 12$



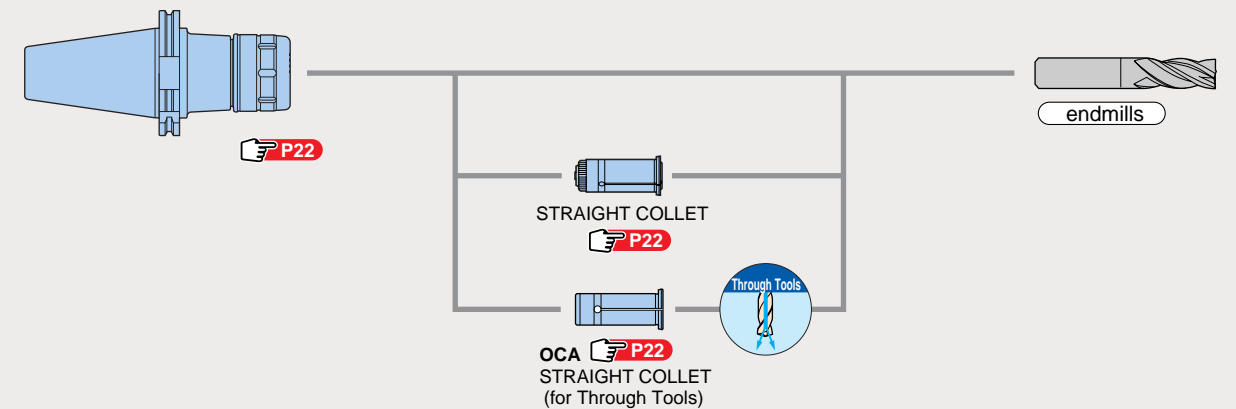
MEGA DOUBLE POWER CHUCK PAT. MAX.25,000min⁻¹ Clamping Range : $\varnothing 16 - \varnothing 42$



Clamping Range : $\varnothing 0.25 - \varnothing 20$



Clamping Range : $\varnothing 20 - \varnothing 42$

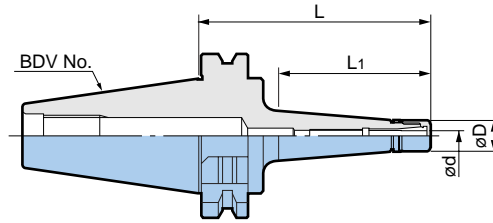




MAX
35,000
min⁻¹

Micro diameter design is ideal for high speed applications in tight areas with small diameter cutting tools.

Model Description
B DV40 - **MEGA** **3** **S** - **60** **T**
 • Taper type
 • L Length
 • Micro Chuck
 • Mega Chuck Series
 • DV Shank No.
 • BIG-PLUS Spindle System



Model	Clamping Range $\varnothing d$	$\varnothing D$	L	L1	MAX. min ⁻¹	Collet Model	Nut Model	Wrench Model	Weight (kg)
BDV40-MEGA3S- 60T	0.45 - 3.25	10	60	29	35,000	NBC3S-□	MGN3S	MGR10	0.95
- 90T			90	59	28,000				1.02
-120T			120	89	22,000				1.14
-MEGA4S- 60T	0.45 - 4.05	12	60	29	35,000	NBC4S-□	MGN4S	MGR12	0.95
- 90T			90	59	28,000				1.03
-120T			120	89	22,000				1.17
-MEGA6S- 60T	0.45 - 6.05	14	60	29	35,000	NBC6S-□	MGN6S	MGR14	0.96
- 90T			90	59	28,000				1.05
-120T			120	89	22,000				1.20

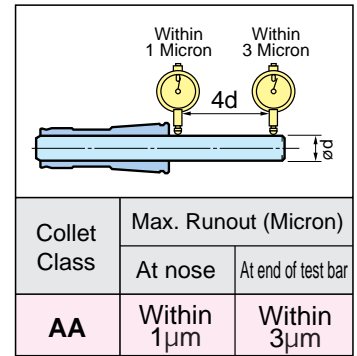
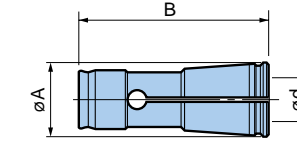
1. Mega Nut is included. Collet and wrench must be ordered separately.
 2. Weight does not include a collet.
 3. The "MAX" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of cutting tool. Therefore, it is possible that the max. allowable speed may not always be achievable.
BIG-PLUS holders can be used in machining centers with conventional spindles.

MEGA MICRO COLLET

Available in 0.1mm diameter increments to suit all the cutting tool shank sizes with maximum accuracy. Despite their compact size, high clamping force and accuracy are achieved.



Model Description
NBC **3** **S** - **0.5** **AA**
 • Class
 • Micro Chuck
 • Max. Body Capacity
 • New Baby Collet



MEGA3S	
Collet Model	Clamping Range $\varnothing d$
NBC3S-0.5 AA	0.45 - 0.55
-0.6 AA	0.55 - 0.65
-0.7 AA	0.65 - 0.75
-0.8 AA	0.75 - 0.85
-0.9 AA	0.85 - 0.95
-1.0 AA	0.95 - 1.05
-1.1 AA	1.05 - 1.15
-1.2 AA	1.15 - 1.25
-1.3 AA	1.25 - 1.35
-1.4 AA	1.35 - 1.45
-1.5 AA	1.45 - 1.55
-1.6 AA	1.55 - 1.65
-1.7 AA	1.65 - 1.75
-1.8 AA	1.75 - 1.85
-1.9 AA	1.85 - 1.95
-2.0 AA	1.95 - 2.05
-2.1 AA	2.05 - 2.15
-2.2 AA	2.15 - 2.25
-2.3 AA	2.25 - 2.35
-2.4 AA	2.35 - 2.45
-2.5 AA	2.45 - 2.55
-2.6 AA	2.55 - 2.65
-2.7 AA	2.65 - 2.75
-2.8 AA	2.75 - 2.85
-2.9 AA	2.85 - 2.95
-3.0 AA	2.95 - 3.05
-3.1 AA	3.05 - 3.15
-3.175AA	3.125 - 3.225
-3.2 AA	3.15 - 3.25

$\varnothing A=6.06$ B=18.8

MEGA4S	
Collet Model	Clamping Range $\varnothing d$
NBC4S-0.5 AA	0.45 - 0.55
-0.6 AA	0.55 - 0.65
-0.7 AA	0.65 - 0.75
-0.8 AA	0.75 - 0.85
-0.9 AA	0.85 - 0.95
-1.0 AA	0.95 - 1.05
-1.1 AA	1.05 - 1.15
-1.2 AA	1.15 - 1.25
-1.3 AA	1.25 - 1.35
-1.4 AA	1.35 - 1.45
-1.5 AA	1.45 - 1.55
-1.6 AA	1.55 - 1.65
-1.7 AA	1.65 - 1.75
-1.8 AA	1.75 - 1.85
-1.9 AA	1.85 - 1.95
-2.0 AA	1.95 - 2.05
-2.1 AA	2.05 - 2.15
-2.2 AA	2.15 - 2.25
-2.3 AA	2.25 - 2.35
-2.4 AA	2.35 - 2.45
-2.5 AA	2.45 - 2.55
-2.6 AA	2.55 - 2.65
-2.7 AA	2.65 - 2.75
-2.8 AA	2.75 - 2.85
-2.9 AA	2.85 - 2.95
-3.0 AA	2.95 - 3.05
-3.1 AA	3.05 - 3.15
-3.175AA	3.125 - 3.225
-3.2 AA	3.15 - 3.25
-3.3 AA	3.25 - 3.35
-3.4 AA	3.35 - 3.45
-3.5 AA	3.45 - 3.55
-3.6 AA	3.55 - 3.65
-3.7 AA	3.65 - 3.75
-3.8 AA	3.75 - 3.85
-3.9 AA	3.85 - 3.95
-4.0 AA	3.95 - 4.05

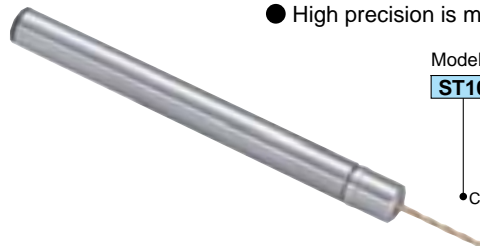
$\varnothing A=7.4$ B=22.5

MEGA6S			
Collet Model	Clamping Range $\varnothing d$	Collet Model	Clamping Range $\varnothing d$
NBC6S-0.5 AA	0.45 - 0.55	NBC6S-4.1 AA	4.05 - 4.15
-0.6 AA	0.55 - 0.65	-4.2 AA	4.15 - 4.25
-0.7 AA	0.65 - 0.75	-4.3 AA	4.25 - 4.35
-0.8 AA	0.75 - 0.85	-4.4 AA	4.35 - 4.45
-0.9 AA	0.85 - 0.95	-4.5 AA	4.45 - 4.55
-1.0 AA	0.95 - 1.05	-4.6 AA	4.55 - 4.65
-1.1 AA	1.05 - 1.15	-4.7 AA	4.65 - 4.75
-1.2 AA	1.15 - 1.25	-4.7625AA	4.7125 - 4.8125
-1.3 AA	1.25 - 1.35	-4.8 AA	4.75 - 4.85
-1.4 AA	1.35 - 1.45	-4.9 AA	4.85 - 4.95
-1.5 AA	1.45 - 1.55	-5.0 AA	4.95 - 5.05
-1.6 AA	1.55 - 1.65	-5.1 AA	5.05 - 5.15
-1.7 AA	1.65 - 1.75	-5.2 AA	5.15 - 5.25
-1.8 AA	1.75 - 1.85	-5.3 AA	5.25 - 5.35
-1.9 AA	1.85 - 1.95	-5.4 AA	5.35 - 5.45
-2.0 AA	1.95 - 2.05	-5.5 AA	5.45 - 5.55
-2.1 AA	2.05 - 2.15	-5.6 AA	5.55 - 5.65
-2.2 AA	2.15 - 2.25	-5.7 AA	5.65 - 5.75
-2.3 AA	2.25 - 2.35	-5.8 AA	5.75 - 5.85
-2.4 AA	2.35 - 2.45	-5.9 AA	5.85 - 5.95
-2.5 AA	2.45 - 2.55	-6.0 AA	5.95 - 6.05
-2.6 AA	2.55 - 2.65		
-2.7 AA	2.65 - 2.75		
-2.8 AA	2.75 - 2.85		
-2.9 AA	2.85 - 2.95		
-3.0 AA	2.95 - 3.05		
-3.1 AA	3.05 - 3.15		
-3.175AA	3.125 - 3.225		
-3.2 AA	3.15 - 3.25		
-3.3 AA	3.25 - 3.35		
-3.4 AA	3.35 - 3.45		
-3.5 AA	3.45 - 3.55		
-3.6 AA	3.55 - 3.65		
-3.7 AA	3.65 - 3.75		
-3.8 AA	3.75 - 3.85		
-3.9 AA	3.85 - 3.95		
-4.0 AA	3.95 - 4.05		

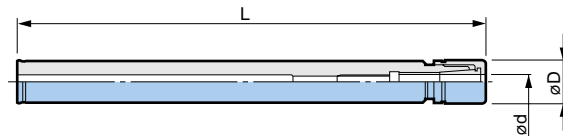
$\varnothing A=9.4$ B=24.5

CYLINDRICAL SHANK TYPE

- $\varnothing 10$ ultra small dia. to avoid interference.
- High precision is maintained by combination with MEGA NEW BABY CHUCK.



Model Description
ST10 - **MEGA** **3** **S** - **120**
 • L Length
 • Micro Chuck
 • Mega Chuck Series
 • Cylindrical Shank Size



Model	Clamping Range $\varnothing d$	$\varnothing D$	L	Collet Model	Nut Model	Wrench Model	Weight (kg)
ST10-MEGA3S-120	0.45 - 3.25	10	120	NBC3S-□	MGN3S	MGR10	0.06
ST12-MEGA4S-130	0.45 - 4.05	12	130	NBC4S-□	MGN4S	MGR12	0.11
-160			160				0.13
ST14-MEGA6S-160	0.45 - 6.05	14	160	NBC6S-□	MGN6S	MGR14	0.18
-200			200				0.21

1. Nut is included. Collet and Wrench are optional.
 2. Weights do not include a collet.

Accessories			Spare Parts	
	MEGA WRENCH	COLLET	MEGA NUT	α TAPER CLEANER
MEGA MICRO CHUCK	Model	Model	Model	Model
MEGA3S	MGR10	NBC3S-□	NBB3S	MGN3S
MEGA4S	MGR12	NBC4S-□	NBB4S	MGN4S
MEGA6S	MGR14	NBC6S-□	NBB6S	MGN6S
				SC-NBC3S
				SC-NBC4S
				SC-NBC6S

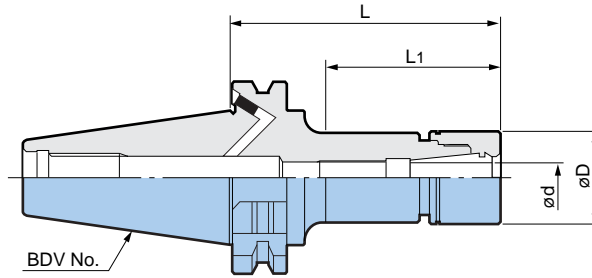


MAX
35,000
min⁻¹

Ideal ultra precision holders for high speed machining with carbide drills, reamers and endmills. Wide range of lengths and a variety of collet series sizes covers all machining applications up to $\varnothing 20$ mm. Standard New Baby Collets are used, which guarantee a runout within 1 micron at the collet chuck nose.

Coolant-Through Hole

Model Description
B DV40 - **MEGA** **6** **N** - **60**
 • L Length
 • New Baby Chuck
 • Max. Capacity
 • Mega Chuck Series
 • DV Shank No.
 • BIG-PLUS Spindle System



Model	Clamping Range $\varnothing d$	$\varnothing D$	L	L1	MAX. min ⁻¹	Collet Model	Nut Model	Wrench Model	Weight (kg)
BDV40-MEGA 6N- 60	0.25 - 6	20	60	29	35,000	NBC 6-□	MGN 6	MGR20	1.0
- 90			90	54	35,000				1.1
-135			135	99	20,000				1.2
-165			165	129	14,000				1.2
-200			200	165	9,000				1.3
-MEGA 8N- 60	0.5 - 8	25	60	29	35,000	NBC 8-□	MGN 8	MGR25	1.0
- 90			90	56	35,000				1.1
-135			135	101	20,000				1.3
-165			165	131	14,000				1.4
-200			200	166	9,000				1.5
-MEGA10N- 60	1.5 - 10	30	60	29	35,000	NBC10-□	MGN10	MGR30	1.1
- 90			90	58	35,000				1.2
-135			135	103	20,000				1.4
-165			165	133	15,000				1.6
-200			200	168	10,000				1.7
-MEGA13N- 60	2.5 - 13	35	60	33	35,000	NBC13-□	MGN13	MGR35	1.1
- 90			90	60	35,000				1.3
-135			135	105	20,000				1.6
-165			165	135	15,000				1.8
-200			200	170	10,000				2.0
-MEGA16N- 60	2.5 - 16	42	60	34	30,000	NBC16-□	MGN16	MGR42	1.2
- 90			90	63	30,000				1.5
-135			135	108	20,000				1.9
-165			165	138	15,000				2.2
-200			200	173	10,000				2.5
-MEGA20N- 60	2.5 - 20	46	60	39	30,000	NBC20-□	MGN20	MGR46	1.3
- 90			90	69	30,000				1.6
-135			135	114	20,000				2.0
-165			165	144	15,000				2.3
-200			200	179	10,000				2.6

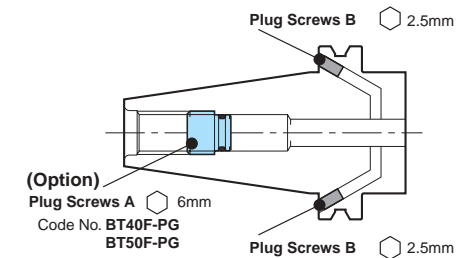
1. Mega New Baby Nut is included. Collet and wrench must be ordered separately.
 2. Weight does not include collet.
 3. Designed to be capable of supplying coolant through spindle.
 4. The "MAX" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of cutting tool. Therefore, it is possible that the max. allowable speed may not always be achievable.
BIG-PLUS toolholders can be used in machining centers with conventional spindles.

Model	Clamping Range $\varnothing d$	$\varnothing D$	L	L1	MAX. min ⁻¹	Collet Model	Nut Model	Wrench Model	Weight (kg)
BDV50-MEGA 6N- 90	0.25- 6	20	90	49	20,000	NBC 6-□	MGN 6	MGR20	3.0
-120			120	79	20,000				3.0
-165			165	124	14,000				3.1
-200			200	159	9,000				3.2
-MEGA 8N- 90			0.5 - 8	25	90				49
-120	120	79			20,000	3.2			
-165	165	124			16,000	3.3			
-200	200	159			11,000	3.4			
-MEGA10N- 90	1.5 - 10	30			90	54	20,000	NBC10-□	MGN10
-120			120	79	20,000	3.3			
-165			165	124	16,000	3.5			
-200			200	159	12,000	3.7			
-MEGA13N- 90			2.5 - 13	35	90	54	18,000		
-120	120	79			18,000	3.4			
-165	165	124			16,000	3.7			
-200	200	159			12,000	3.9			
-MEGA16N- 90	2.5 - 16	42			90	54	17,000	NBC16-□	MGN16
-120			120	84	17,000	3.7			
-165			165	129	16,000	4.1			
-200			200	164	13,000	4.4			
-MEGA20N- 90			2.5 - 20	46	90	54	16,000		
-120	120	84			16,000	3.8			
-165	165	129			15,000	4.3			
-200	200	164			13,000	4.6			

1. Mega New Baby Nut is included. Collet and wrench must be ordered separately.
 2. Weight does not include collet.
 3. Designed to be capable of supplying coolant through spindle.
 4. The "MAX" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of cutting tool. Therefore, it is possible that the max. allowable speed may not always be achievable.
BIG-PLUS toolholders can be used in machining centers with conventional spindles.

Accessories								Spare Parts	
MEGA WRENCH	COLLET	SEALING NUT	ADJUSTING SCREW	MEGA NUT					
MEGA NEW BABY CHUCK	Model	Model	Model	Model	G	L	B	Model	
MEGA 6N	MGR20	NBC 6-□	MPS 6-□	NBA 6B	M 7	12	2	MGN 6	
MEGA 8N	MGR25	NBC 8-□	MPS 8-□	NBA 8B	M 9	13	2.5	MGN 8	
MEGA10N	MGR30	NBC10-□	MPS10-□	NBA10B	M11	16	3	MGN10	
MEGA13N	MGR35	NBC13-□	MPS13-□	NBA13B	M14	20	4	MGN13	
MEGA16N	MGR42	NBC16-□	MPS16-□	NBA16B	M18	20	4	MGN16	
MEGA20N	MGR46	NBC20-□	MPS20-□	NBA20B	M21	20	4	MGN20	

• Plug Screw for flange through coolant



This Plug Screw A(option) prevents coolant leakage through the retention knob.

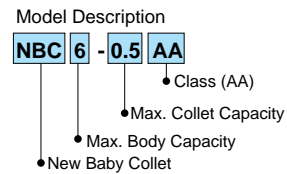
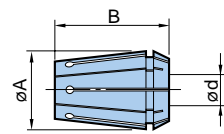
Bores on form B are sealed with Plug Screw B.

*Remove 2 pcs Plug Screws B from end face of flange.
 *Failure to use the Plug Screw "A" or other sealing method may result in coolant contamination of spindle and lead to its premature failure or accidents.

NEW BABY COLLET



The **BIG** New Baby Collet is world renowned for its unmatched accuracy and precision. It offers runout less than 1 micron at the collet nose, which is a decided advantage in high speed machining.



Collet Class	Max. Runout	
	At nose	At end of test bar
CLASS AA	Within 1 μ m	Within 3 μ m

Within 1 μ m Within 3 μ m

MEGA6N / NBS6	
Model	Clamping Range \varnothing d
NBC 6-0.5 AA	0.25 - 0.50
-0.75AA	0.50 - 0.75
-1 AA	0.75 - 1.00
-1.25AA	1.00 - 1.25
-1.5 AA	1.25 - 1.50
-1.75AA	1.50 - 1.75
-2 AA	1.75 - 2.00
-2.25AA	2.00 - 2.25
-2.5 AA	2.25 - 2.50
-2.75AA	2.50 - 2.75
-3 AA	2.75 - 3.00
-3.175AA	2.925 - 3.175
-3.25AA	3.00 - 3.25
-3.5 AA	3.25 - 3.50
-3.75AA	3.50 - 3.75
-4 AA	3.75 - 4.00
-4.25AA	4.00 - 4.25
-4.5 AA	4.25 - 4.50
-4.75AA	4.50 - 4.75
-5 AA	4.75 - 5.00
-5.25AA	5.00 - 5.25
-5.5 AA	5.25 - 5.50
-5.75AA	5.50 - 5.75
-6 AA	5.75 - 6.00

\varnothing A=9.5 B=14

MEGA8N / NBS8	
Model	Clamping Range \varnothing d
NBC 8-1 AA	0.5 - 1.0
-1.5 AA	1.0 - 1.5
-2 AA	1.5 - 2.0
-2.5 AA	2.0 - 2.5
-3 AA	2.5 - 3.0
-3.175AA	2.925 - 3.175
-3.5 AA	3.0 - 3.5
-4 AA	3.5 - 4.0
-4.5 AA	4.0 - 4.5
-5 AA	4.5 - 5.0
-5.5 AA	5.0 - 5.5
-6 AA	5.5 - 6.0
-6.5 AA	6.0 - 6.5
-7 AA	6.5 - 7.0
-7.5 AA	7.0 - 7.5
-8 AA	7.5 - 8.0

\varnothing A=12.5 B=18

MEGA10N / NBS10	
Model	Clamping Range \varnothing d
NBC10- 2 AA	1.5 - 2.0
- 2.5 AA	2.0 - 2.5
- 3 AA	2.5 - 3.0
- 3.175AA	2.925 - 3.175
- 3.5 AA	3.0 - 3.5
- 4 AA	3.5 - 4.0
- 4.5 AA	4.0 - 4.5
- 5 AA	4.5 - 5.0
- 5.5 AA	5.0 - 5.5
- 6 AA	5.5 - 6.0
- 6.5 AA	6.0 - 6.5
- 7 AA	6.5 - 7.0
- 7.5 AA	7.0 - 7.5
- 8 AA	7.5 - 8.0
- 8.5 AA	8.0 - 8.5
- 9 AA	8.5 - 9.0
- 9.5 AA	9.0 - 9.5
-10 AA	9.5 - 10.0

\varnothing A=16.5 B=27

MEGA13N / NBS13	
Model	Clamping Range \varnothing d
NBC13- 3 AA	2.5 - 3.0
- 3.175AA	2.925 - 3.175
- 3.5 AA	3.0 - 3.5
- 4 AA	3.5 - 4.0
- 4.5 AA	4.0 - 4.5
- 5 AA	4.5 - 5.0
- 5.5 AA	5.0 - 5.5
- 6 AA	5.5 - 6.0
- 6.5 AA	6.0 - 6.5
- 7 AA	6.5 - 7.0
- 7.5 AA	7.0 - 7.5
- 8 AA	7.5 - 8.0
- 8.5 AA	8.0 - 8.5
- 9 AA	8.5 - 9.0
- 9.5 AA	9.0 - 9.5
-10 AA	9.5 - 10.0
-10.5 AA	10.0 - 10.5
-11 AA	10.5 - 11.0
-11.5 AA	11.0 - 11.5
-12 AA	11.5 - 12.0
-12.5 AA	12.0 - 12.5
-13 AA	12.5 - 13.0

\varnothing A=20.5 B=31

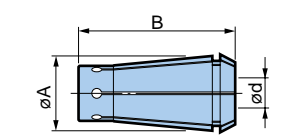
MEGA16N / NBS16	
Model	Clamping Range \varnothing d
NBC16- 3 AA	2.5 - 3.0
- 3.5AA	3.0 - 3.5
- 4 AA	3.5 - 4.0
- 4.5AA	4.0 - 4.5
- 5 AA	4.5 - 5.0
- 5.5AA	5.0 - 5.5
- 6 AA	5.5 - 6.0
- 6.5AA	6.0 - 6.5
- 7 AA	6.5 - 7.0
- 7.5AA	7.0 - 7.5
- 8 AA	7.5 - 8.0
- 8.5AA	8.0 - 8.5
- 9 AA	8.5 - 9.0
- 9.5AA	9.0 - 9.5
-10 AA	9.5 - 10.0
-10.5AA	10.0 - 10.5
-11 AA	10.5 - 11.0
-11.5AA	11.0 - 11.5
-12 AA	11.5 - 12.0
-12.5AA	12.0 - 12.5
-13 AA	12.5 - 13.0
-13.5AA	13.0 - 13.5
-14 AA	13.5 - 14.0
-14.5AA	14.0 - 14.5
-15 AA	14.5 - 15.0
-15.5AA	15.0 - 15.5
-16 AA	15.5 - 16.0

\varnothing A=25.5 B=35

MEGA20N / NBS20	
Model	Clamping Range \varnothing d
NBC20- 3 AA	2.5 - 3.0
- 3.5AA	3.0 - 3.5
- 4 AA	3.5 - 4.0
- 4.5AA	4.0 - 4.5
- 5 AA	4.5 - 5.0
- 5.5AA	5.0 - 5.5
- 6 AA	5.5 - 6.0
- 6.5AA	6.0 - 6.5
- 7 AA	6.5 - 7.0
- 7.5AA	7.0 - 7.5
- 8 AA	7.5 - 8.0
- 8.5AA	8.0 - 8.5
- 9 AA	8.5 - 9.0
- 9.5AA	9.0 - 9.5
-10 AA	9.5 - 10.0
-10.5AA	10.0 - 10.5
-11 AA	10.5 - 11.0
-11.5AA	11.0 - 11.5
-12 AA	11.5 - 12.0
-12.5AA	12.0 - 12.5
-13 AA	12.5 - 13.0
-13.5AA	13.0 - 13.5
-14 AA	13.5 - 14.0
-14.5AA	14.0 - 14.5
-15 AA	14.5 - 15.0
-15.5AA	15.0 - 15.5
-16 AA	15.5 - 16.0
-16.5AA	16.0 - 16.5
-17 AA	16.5 - 17.0
-17.5AA	17.0 - 17.5
-18 AA	17.5 - 18.0
-18.5AA	18.0 - 18.5
-19 AA	18.5 - 19.0
-19.5AA	19.0 - 19.5
-20 AA	19.5 - 20.0

\varnothing A=28.5 B=38

NEW BABY COLLET



MEGA6N / NBS6	
Model	\varnothing d
NBC 6-3E AA	3
-4E AA	4
-5E AA	5
-6E AA	6

\varnothing A=9.2 B=17

MEGA8N / NBS8	
Model	\varnothing d
NBC 8-3E AA	3
-4E AA	4
-5E AA	5
-6E AA	6
-8E AA	8

\varnothing A=12 B=20

MEGA10N / NBS10	
Model	\varnothing d
NBC10- 3E AA	3
- 4E AA	4
- 5E AA	5
- 6E AA	6
- 8E AA	8
-10E AA	10

\varnothing A=16 B=32

MEGA13N / NBS13	
Model	\varnothing d
NBC13- 3E AA	3
- 4E AA	4
- 5E AA	5
- 6E AA	6
- 8E AA	8
-10E AA	10
-12E AA	12

\varnothing A=20 B=38

MEGA16N / NBS16	
Model	\varnothing d
NBC16- 3E AA	3
- 4E AA	4
- 5E AA	5
- 6E AA	6
- 8E AA	8
-10E AA	10
-12E AA	12
-14E AA	14
-16E AA	16

\varnothing A=25 B=42

MEGA20N / NBS20	
Model	\varnothing d
NBC20- 3E AA	3
- 4E AA	4
- 5E AA	5
- 6E AA	6
- 8E AA	8
-10E AA	10
-12E AA	12
-14E AA	14
-16E AA	16
-20E AA	20

\varnothing A=28 B=45

- Use only a cutting tool shank with exactly the same diameter as the collet bore diameter.
- The tolerance of the cutting tool shank must be within h7.

COLLET EJECTOR

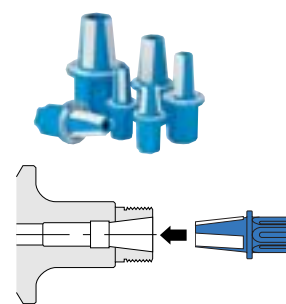
For easy assembly or removal of New Baby Collet



Model	Nut Model	Collet Model
NBC 6-CE	MGN 6	NBC 6
NBC 8-CE	MGN 8	NBC 8
NBC10-CE	MGN10	NBC10
NBC13-CE	MGN13	NBC13

Inside Taper Cleaner of Collet Chucks
α TAPER CLEANER

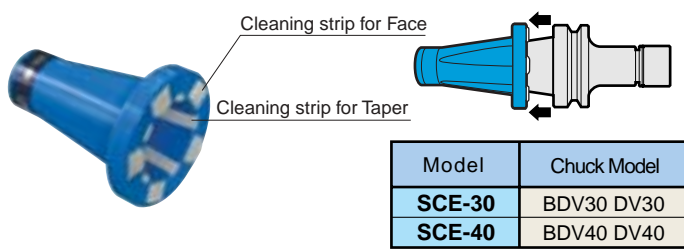
Maintain the precision of collet chucks



Model	Chuck Model
SC-NBC 6	MEGA 6N
SC-NBC 8	MEGA 8N
SC-NBC10	MEGA10N
SC-NBC13	MEGA13N
SC-NBC16	MEGA16N
SC-NBC20	MEGA20N

Toolholder taper cleaner
α TOOLING CLEANER

Cleaner enhances the repeatability to Machine spindle. Easy cleaning for Taper and Face in Single action.



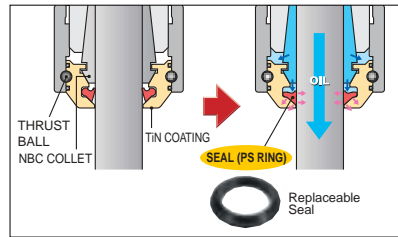
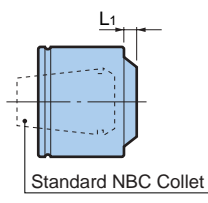
Model	Chuck Model
SCE-30	BDV30 DV30
SCE-40	BDV40 DV40

MEGA PERFECT SEAL PAT. Sealed collet nut for coolant-through tools

MAX. COOLANT PRESSURE
7MPa

Model Description
MPS 6-03035

- Tool Shank Dia. Clamping Range : $\varnothing 3 - \varnothing 3.5$
- Body Size
- Mega Perfect Seal



Reliable coolant supply to the tool tip!

Unique design increases sealing performance with higher coolant pressure to create a "perfect seal".

2way coolant

Through Tools Jet Through

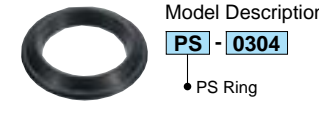


With PS RING Without PS RING

Model	Cutter Shank Dia.	L1	Collet Model	Model	Cutter Shank Dia.	L1	Collet Model
MPS 6-03035	3 - 3.5	2.3	NBC 6-3 - 3.75	MPS16-03035	3 - 3.5	4.0	NBC16-3 - 4
-0304	3 - 4		-3 - 4.25	-0304	3 - 4		-3 - 4.5
-04045	4 - 4.5		-4 - 4.75	-04045	4 - 4.5		-4 - 5
-0405	4 - 5		-4 - 5.25	-0405	4 - 5		-4 - 5.5
-05055	5 - 5.5		-5 - 5.75	-05055	5 - 5.5		-5 - 6
-0506	5 - 6	-5 - 6	-0506	5 - 6	-5 - 6.5		
MPS 8-03035	3 - 3.5	3.9	NBC 8-3 - 4	-06065	6 - 6.5	4.3	-6 - 7
-0304	3 - 4		-3 - 4.5	-0607	6 - 7		-6 - 7.5
-04045	4 - 4.5		-4 - 5	-07075	7 - 7.5		-7 - 8
-0405	4 - 5		-4 - 5.5	-0708	7 - 8		-7 - 8.5
-05055	5 - 5.5		-5 - 6	-08085	8 - 8.5		-8 - 9
-0506	5 - 6	-5 - 6.5	-0809	8 - 9	-8 - 9.5		
-06065	6 - 6.5	-6 - 7	-09095	9 - 9.5	-9 - 10		
-0607	6 - 7	-6 - 7.5	-0910	9 - 10	-9 - 10.5		
-07075	7 - 7.5	-7 - 8	-10105	10 - 10.5	-10 - 11		
-0708	7 - 8	-7 - 8	-1011	10 - 11	-10 - 11.5		
MPS10-03035	3 - 3.5	3.4	NBC10-3 - 4	-11115	11 - 11.5	5.1	-11 - 12
-0304	3 - 4		-3 - 4.5	-1112	11 - 12		-11 - 12.5
-04045	4 - 4.5		-4 - 5	-12125	12 - 12.5		-12 - 13
-0405	4 - 5		-4 - 5.5	-1213	12 - 13		-12 - 13.5
-05055	5 - 5.5		-5 - 6	-1314	13 - 14		-13 - 14.5
-0506	5 - 6	-5 - 6.5	-1415	14 - 15	-14 - 15.5		
-06065	6 - 6.5	-6 - 7	-1516	15 - 16	-15 - 16		
-0607	6 - 7	-6 - 7.5	MPS20-03035	3 - 3.5	4.1	NBC20-3 - 4	
-07075	7 - 7.5	-7 - 8	-0304	3 - 4		-3 - 4.5	
-0708	7 - 8	-7 - 8.5	-04045	4 - 4.5		-4 - 5	
-08085	8 - 8.5	-8 - 9	-0405	4 - 5		-4 - 5.5	
-0809	8 - 9	-8 - 9.5	-05055	5 - 5.5		-5 - 6	
-09095	9 - 9.5	-9 - 10	-0506	5 - 6	-5 - 6.5		
-0910	9 - 10	-9 - 10	-06065	6 - 6.5	-6 - 7		
MPS13-03035	3 - 3.5	4.3	NBC13-3 - 4	-0607	6 - 7	4.0	-6 - 7.5
-0304	3 - 4		-3 - 4.5	-07075	7 - 7.5		-7 - 8
-04045	4 - 4.5		-4 - 5	-0708	7 - 8		-7 - 8.5
-0405	4 - 5		-4 - 5.5	-08085	8 - 8.5		-8 - 9
-05055	5 - 5.5		-5 - 6	-0809	8 - 9		-8 - 9.5
-0506	5 - 6	-5 - 6.5	-09095	9 - 9.5	-9 - 10		
-06065	6 - 6.5	-6 - 7	-0910	9 - 10	-9 - 10.5		
-0607	6 - 7	-6 - 7.5	-10105	10 - 10.5	-10 - 11		
-07075	7 - 7.5	-7 - 8	-1011	10 - 11	-10 - 11.5		
-0708	7 - 8	-7 - 8.5	-11115	11 - 11.5	-11 - 12		
-08085	8 - 8.5	-8 - 9	-1112	11 - 12	-11 - 12.5		
-0809	8 - 9	-8 - 9.5	-12125	12 - 12.5	-12 - 13		
-09095	9 - 9.5	-9 - 10	-1213	12 - 13	-12 - 13.5		
-0910	9 - 10	-9 - 10.5	-1314	13 - 14	-13 - 14.5		
-10105	10 - 10.5	-10 - 11	-1415	14 - 15	-14 - 15.5		
-1011	10 - 11	-10 - 11.5	-1516	15 - 16	-15 - 16.5		
-11115	11 - 11.5	-11 - 12	-1617	16 - 17	-16 - 17.5		
-1112	11 - 12	-11 - 12.5	-1718	17 - 18	-17 - 18.5		
-12125	12 - 12.5	-12 - 13	-1819	18 - 19	-18 - 19.5		
-1213	12 - 13	-12 - 13	-1920	19 - 20	-19 - 20		

- 1 pce. of PS Ring is included.
- To supply coolant to the periphery of the cutting tool, Adjusting Screw should not be mounted.

[PS RING]



- Replaceable seal is installed in the MEGA PERFECT SEAL
- (Replacement seal is recommended when coolant leaks due to damage of the PS Ring.)

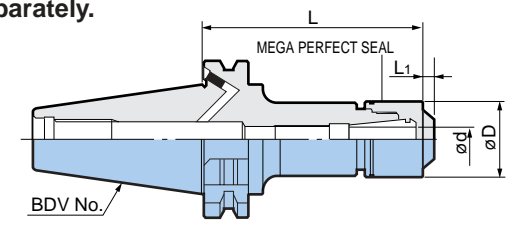
Model	Corresponding MPS Model	Model	Corresponding MPS Model	Model	Corresponding MPS Model
PS-0304	MPS□-03035,0304	PS-0809	MPS□-08085,0809	PS-1314	MPS□-1314
0405	04045,0405	0910	09095,0910	1415	1415
0506	05055,0506	1011	10105,1011	1516	1516
0607	06065,0607	1112	11115,1112	1617	1617
0708	07075,0708	1213	12125,1213	1718	1718
				1819	1819
				1920	1920

1 package contains 5 pcs. (1 size).

BODY + MEGA PERFECT SEAL



Nut is not included as a standard accessory in the Body models with "NL" at the end. Please order the suitable Mega Perfect Seal separately.



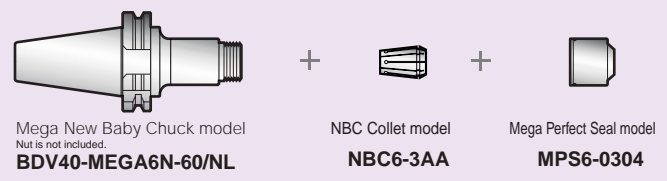
Body Model	$\varnothing d$	$\varnothing D$	L	Mega Perfect Seal Model
Mega Perfect Seal is not included.				
BDV40-MEGA 6N- 60/NL	3 - 6	20	60	MPS 6-□□□□
- 90/NL			90	
-135/NL			135	
-165/NL			165	
-200/NL			200	
-MEGA 8N- 60/NL	3 - 8	25	60	MPS 8-□□□□
- 90/NL			90	
-135/NL			135	
-165/NL			165	
-200/NL			200	
-MEGA10N- 60/NL	3 - 10	30	60	MPS10-□□□□
- 90/NL			90	
-135/NL			135	
-165/NL			165	
-200/NL			200	
-MEGA13N- 60/NL	3 - 13	35	60	MPS13-□□□□
- 90/NL			90	
-135/NL			135	
-165/NL			165	
-200/NL			200	
-MEGA16N- 60/NL	3 - 16	42	60	MPS16-□□□□
- 90/NL			90	
-135/NL			135	
-165/NL			165	
-200/NL			200	
-MEGA20N- 60/NL	3 - 20	46	60	MPS20-□□□□
- 90/NL			90	
-135/NL			135	
-165/NL			165	
-200/NL			200	

Body Model	$\varnothing d$	$\varnothing D$	L	Mega Perfect Seal Model
Mega Perfect Seal is not included.				
BDV50-MEGA 6N- 90/NL	3 - 6	20	90	MPS 6-□□□□
-120/NL			120	
-165/NL			165	
-200/NL			200	
-MEGA 8N- 90/NL	3 - 8	25	90	MPS 8-□□□□
-120/NL			120	
-165/NL			165	
-200/NL			200	
-MEGA10N- 90/NL	3 - 10	30	90	MPS10-□□□□
-120/NL			120	
-165/NL			165	
-200/NL			200	
-MEGA13N- 90/NL	3 - 13	35	90	MPS13-□□□□
-120/NL			120	
-165/NL			165	
-200/NL			200	
-MEGA16N- 90/NL	3 - 16	42	90	MPS16-□□□□
-120/NL			120	
-165/NL			165	
-200/NL			200	
-MEGA20N- 90/NL	3 - 20	46	90	MPS20-□□□□
-120/NL			120	
-165/NL			165	
-200/NL			200	

1. Mega Perfect Seal Collet and wrench must be ordered separately.
 2. Designed to be capable of supplying coolant through spindle.
- BIG-PLUS toolholders can be used in machining centers with conventional spindles.
- For axially adjustable range (H), weight and max. speed, refer to pages 11 to 13. For L1 dimension, refer to the table on the previous page 15.

Order Example

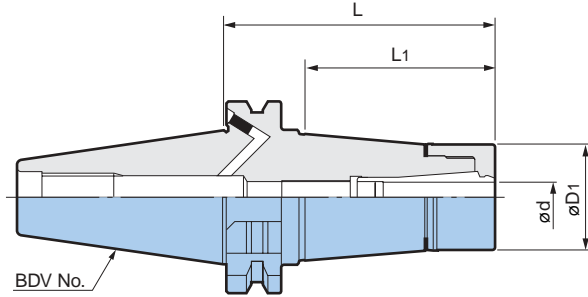
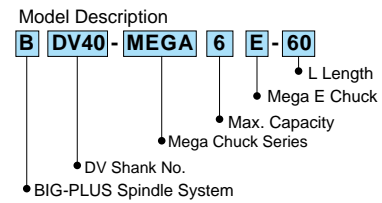
Please specify model numbers of the Body, NBC Collet and Mega Perfect Seal when ordering.





Exclusively designed with the advanced technology for high speed endmilling. The long gripping length of the collet provides a powerful gripping force. The shallow taper of the collet improves concentricity. The substantial body design enhances rigidity to prevent chatter and deflection.

Coolant-Through Hole



Plug Screw for flange through coolant

For details of plug screws, please refer to P10.

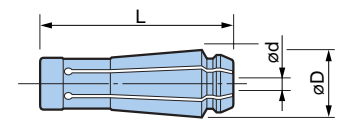
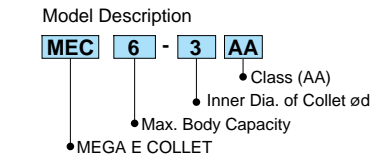
Model	Clamping Range $\varnothing d$	$\varnothing D$	L	L1	MAX. min^{-1}	Collet Model	Nut Model	Wrench Model	Weight (kg)
BDV40-MEGA 6E- 60	3 - 6	25	60	30.4	30,000	MEC 6-□	MEN 6	MGR25	1.1
- 90			90	59	30,000				1.2
-120			120	92	29,000				1.4
-MEGA 8E- 60	3 - 8	30	60	30.4	30,000	MEC 8-□	MEN 8	MGR30	1.2
- 90			90	62	30,000				1.3
-120			120	93	29,000				1.5
-MEGA 10E- 60	3 - 10	35	60	33	30,000	MEC10-□	MEN10	MGR35	1.3
- 90			90	63	30,000				1.4
-120			120	92	29,000				1.7
-MEGA 13E- 60	3 - 12	42	60	35	30,000	MEC13-□	MEN13	MGR42	1.5
- 90			90	60	30,000				1.7
-120			120	95	29,000				1.9
BDV50-MEGA 6E-120	3 - 6	25	120	89	20,000	MEC 6-□	MEN 6	MGR25	3.3
-165			165	134	14,000				3.8
-MEGA 8E-120			3 - 8	30	120				89
-165	165	134			16,000	3.9			
-MEGA 10E- 90	3 - 10	35			90	59	20,000	MEC10-□	MEN10
-120			120	89	20,000	3.6			
-165			165	134	16,000	4.1			
-MEGA 13E- 90	3 - 12	42	90	59	18,000	MEC13-□	MEN13	MGR42	3.6
-120			120	89	18,000				3.8
-165			165	136	16,000				4.4

1. Nut is included. Collet and wrench must be ordered separately.
2. Weight does not include a collet.
3. Designed to be capable of supplying coolant through spindle.
4. The "MAX" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of cutting tool. Therefore, it is possible that the max. allowable speed may not always be achievable. BIG-PLUS toolholders can be used in machining centers with conventional spindles.

Accessories				Spare Parts			
	MEGA WRENCH	COLLET	ADJUSTING SCREW			MEGA E NUT	
MEGA E CHUCK							
	Model	Model	Model	G	L	B	Model
MEGA 6E	MGR25	MEC 6-□	NBA 6B	M 7	12	2	MEN 6
MEGA 8E	MGR30	MEC 8-□	NBA 8B	M 9	13	2.5	MEN 8
MEGA10E	MGR35	MEC10-□	NBA10B	M11	16	3	MEN10
MEGA13E	MGR42	MEC13-□	NBA13B	M14	20	4	MEN13

Please be aware of the different sizes of the suitable MEGA WRENCH between MEGA E CHUCK and MEGA NEW BABY CHUCK.

MEGA E COLLET PAT.P



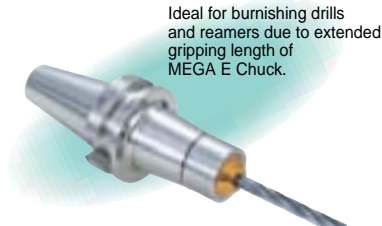
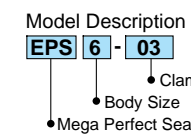
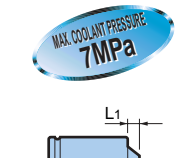
Collet Class	Max. Runout (Micron)	
	At nose	At end of test bar
AA	Within 1 μm	Within 3 μm

BODY MODEL / MEGA 6E			BODY MODEL / MEGA 8E			BODY MODEL / MEGA10E			BODY MODEL / MEGA13E		
Model	$\varnothing d$	Minimum Insertion Length of Tool Shank	Model	$\varnothing d$	Minimum Insertion Length of Tool Shank	Model	$\varnothing d$	Minimum Insertion Length of Tool Shank	Model	$\varnothing d$	Minimum Insertion Length of Tool Shank
MEC6-3AA	3	19	MEC8-3AA	3	19	MEC10- 3AA	3	19	MEC13- 3AA	3	19
-4AA	4	22	-4AA	4	22	- 4AA	4	22	- 4AA	4	22
-5AA	5	25	-5AA	5	25	- 5AA	5	25	- 5AA	5	25
-6AA	6	27	-6AA	6	28	- 6AA	6	28	- 6AA	6	28
			-7AA	7	29	- 7AA	7	29.5	- 7AA	7	29.5
			-8AA	8	31	- 8AA	8	31	- 8AA	8	31
						- 9AA	9	33	- 9AA	9	33
						-10AA	10	37	-10AA	10	35
									-11AA	11	37
									-12AA	12	39

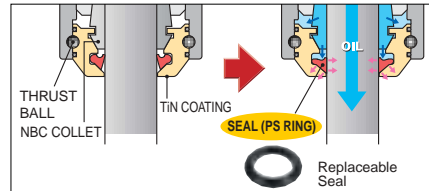
L=34.9 $\varnothing D=11.3$ Nut Model=MEN6
L=39.4 $\varnothing D=14.1$ Nut Model=MEN8
L=45.7 $\varnothing D=17.1$ Nut Model=MEN10
L=47.9 $\varnothing D=20.6$ Nut Model=MEN13

- Use only a cutting tool shank with exactly the same diameter as the collet bore diameter.
- The tolerance of the cutting tool shank must be within h7.

MEGA E PERFECT SEAL PAT. Sealed collet nut for coolant-through tools



Reliable coolant supply to the tool tip!
Unique design increases sealing performance with higher coolant pressure to create a "perfect seal". Remove the PS Ring, to supply coolant to the cutting tool periphery.



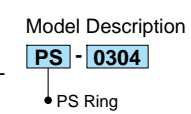
MODEL	L1	Cutter Shank Dia.	Collet Model	MODEL	L1	Cutter Shank Dia.	Collet Model
EPS 6-03	5.6	3	MEC 6- 3	EPS10-07	6.3	7	MEC10- 7
-04		4	- 4	-08		8	- 8
-05	5.2	5	- 5	-09		9	- 9
-06		6	- 6	-10	5.7	10	-10
EPS 8-03	6.4	3	MEC 8- 3	EPS13-03	6.4	3	MEC13- 3
-04		4	- 4	-04		4	- 4
-05	6	5	- 5	-05	6	5	- 5
-06		6	- 6	-06		6	- 6
-07	5.6	7	- 7	-07	6.3	7	- 7
-08		8	- 8	-08		8	- 8
EPS10-03	6.4	3	MEC10- 3	-09	6.5	9	- 9
-04		4	- 4	-10		10	-10
-05	6	5	- 5	-11	6.2	11	-11
-06		6	- 6	-12		12	-12

- 1 pce. of PS Ring is included.
- To supply coolant to the periphery of the cutting tool, Adjusting Screw should not be mounted.

[PS RING]



Replaceable seal is installed in the MEGA PERFECT SEAL



(Replacement seal is recommended when coolant leaks due to damage of the PS Ring.)

Model	EPS Model	Model	EPS Model	Model	EPS Model
PS-0304	EPS□-03	PS-0607	EPS□-06	PS-0910	EPS□-09
-0405	-04	-0708	-07	-1011	-10
-0506	-05	-0809	-08	-1112	-11
				-1213	-12

Inside Taper Cleaner of Collet Chucks

Q TAPER CLEANER

Maintain the precision of collet chucks



Model	Chuck Model
SC-MEC 6	MEGA 6E
SC-MEC 8	MEGA 8E
SC-MEC10	MEGA10E
SC-MEC13	MEGA13E

Toolholder taper cleaner

Q TOOLING CLEANER

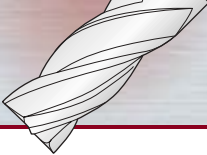
Cleaner enhances the repeatability to Machine spindle. Easy cleaning for Taper and Face in Single action.



Cleaning strip for Face
Cleaning strip for Taper

Model	Chuck Model
SCE-30	BDV30 DV30
SCE-40	BDV40 DV40

1 package contains 5 pcs. (1 size).



Type DS For coolant to cutting tool periphery

Close to integral rigidity and precision of a solid toolholder. Flange contacting nut assures highest rigidity.



MAX
25,000
min⁻¹



Coolant-Through Hole

Model Description

B DV40- MEGA 16 DS - 90

- Double Power Chuck for type DS
- Clamping Dia.
- Mega Chuck series
- DV Shank No.
- BIG-PLUS Spindle System

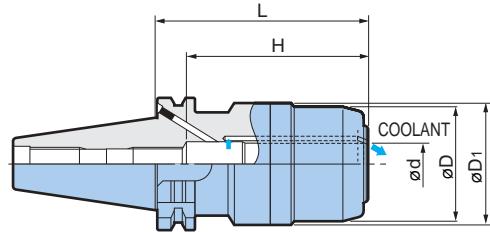


Fig. 1

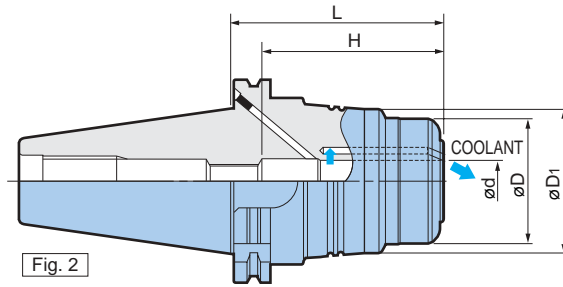


Fig. 2

Plug Screw for flange through coolant

For details of plug screws, please refer to **P10**.

Model	Fig	ød	øD	øD1	L	H	MAX. min ⁻¹	Wrench	Weight (kg)
BDV40-MEGA16DS- 90	1	16	46	55	92.4	73	25,000	MGR46	1.9
-MEGA20DS-100		20	55	55.7	102.4	71 - 81	22,000	MGR55	2.1
-MEGA25DS-100		25	62	62.7	102.4	71 - 81	18,000	MGR62	2.4
-MEGA32DS-100		32	70	70.7	102.4	76 - 86	12,000	MGR70	2.5
BDV50-MEGA16DS- 70	2	16	46	55	72.4	73	20,000	MGR46	3.5
-MEGA20DS-100		20	60	69	102.4	71 - 81	20,000	MGR60	4.9
-MEGA25DS-105	1	25	70	77	107.4	76 - 86	18,000	MGR70	5.4
-MEGA32DS-105		32	80	86	107.4	80 - 94	15,000	MGR80	5.7
-MEGA42DS-105		42	99	99.7	107.4	90 - 107	12,000	MGR99	6.6

BIG-PLUS toolholders can be used in machining centers with conventional spindles.

1. Wrench must be ordered separately.
2. The "MAX" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of cutting tool. Therefore, it is possible that the max. allowable speed may not always be achievable.

Accessories

MEGA DOUBLE POWER CHUCK	MEGA WRENCH	ADJUSTING SCREW	Adjusting Screw Dimensions				
			øD	L	L1	G	W
BDV40-MEGA16DS	MGR46	—	—	—	—	—	—
-MEGA20DS	MGR55	HMA-M16	19	27	6	M16P1.5	8
-MEGA25DS	MGR62	HMA-M16	19	27	6	M16P1.5	8
-MEGA32DS	MGR70	HMA-M16S	19	27	6	M16P1.5	10
BDV50-MEGA16DS	MGR46	—	—	—	—	—	—
-MEGA20DS	MGR60	HMA-M16	19	27	6	M16P1.5	8
-MEGA25DS	MGR70	HMA-M16	19	27	6	M16P1.5	8
-MEGA32DS	MGR80	HMA-M24	30	36	9.5	M24P1.5	10
-MEGA42DS	MGR99	HMA-M24	30	36	9.5	M24P1.5	10

STRAIGHT COLLET (Type "AC")

- Reduction sleeve for smaller diameter cutters.



Model Description

AC 20 - 6

- Inner dia.
- Outer dia.
- Collet type "AC"

Model	MEGA DOUBLE POWER CHUCK
AC20 - 6, 8, 10, 12, 16	MEGA20DS
AC25 - 6, 8, 10, 12, 16, 20	MEGA25DS
AC32 - 6, 8, 10, 12, 16, 20, 25	MEGA32DS
AC42 - 6, 8, 10, 12, 16, 20, 25, 32	MEGA42DS

OIL HOLE STRAIGHT COLLET (Type "OCA")



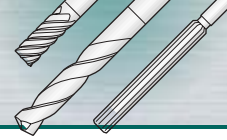
Model Description

OCA 20 - 10

- Inner dia.
- Outer dia.
- Oil Hole Collet

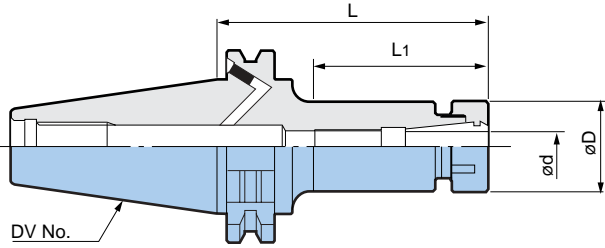
For JET Through with MEGA-DS

Model	MEGA DOUBLE POWER CHUCK
OCA20 -10, 12, 16	MEGA20DS
OCA25 -16, 20	MEGA25DS
OCA32 -16, 20, 25	MEGA32DS



MAX*
20,000
min⁻¹

Great variety in length in order to support high precision machining



Plug Screw for flange through coolant

For details of plug screws, please refer to P10.

Coolant-Through Hole

- Model Description
DV40 - **NBS** **6** - **60**
- L Length
 - Max. Capacity
 - New Baby Chuck System
 - DV Shank No.

Model	Clamping Range $\varnothing d$	$\varnothing D$	L	L1	Collet Model	Nut Model	Wrench Model	Weight (kg)
DV40-NBS 6- 60	0.25 - 6	20	60	28	NBC 6-□	NBN 6	NBK 6	1.0
- 90			90	54				1.1
-135			135	99				1.2
-165			165	129				1.2
-200			200	164				1.3
-NBS 8- 60	0.5 - 8	25	60	28	NBC 8-□	NBN 8	NBK 8	1.0
- 90			90	56				1.1
-135			135	101				1.3
-165			165	131				1.4
-200			200	166				1.5
-NBS10- 60	1.5 - 10	30	60	28	NBC10-□	NBN10	NBK10	1.1
- 90			90	58				1.2
-135			135	103				1.4
-165			165	133				1.6
-200			200	168				1.8
-NBS13- 60	2.5 - 13	35	60	31	NBC13-□	NBN13	NBK13	1.1
- 90			90	60				1.3
-135			135	105				1.6
-165			165	135				1.8
-200			200	170				2.0
-NBS16- 60	2.5 - 16	42	60	33	NBC16-□	NBN16	NBK16	1.2
- 90			90	63				1.5
-135			135	108				1.9
-165			165	138				2.2
-200			200	173				2.5
-NBS20- 60	2.5 - 20	46	60	39	NBC20-□	NBN20	NBK20	1.3
- 90			90	69				1.6
-135			135	114				2.0
-165			165	144				2.3
-200			200	179				2.6

1. Nut is included. Collet, Wrench & Adjusting Screw must be ordered separately.
 2. Weights do not include a collet.
 3. ※Max. 20,000 min⁻¹ is valid for DV40 with L = 60 or 90mm.
 4. Other types of shank are also available upon request.

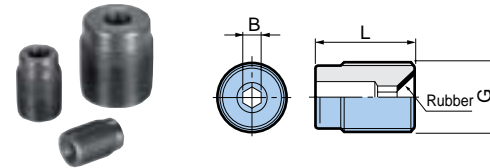
Model	Clamping Range $\varnothing d$	$\varnothing D$	L	L1	Collet Model	Nut Model	Wrench Model	Weight (kg)
DV50-NBS 6- 90	0.25 - 6	20	90	49	NBC 6-□	NBN 6	NBK 6	3.0
-120			120	79				3.0
-165			165	124				3.1
-200			200	159				3.2
-NBS 8- 90	0.5 - 8	25	90	49	NBC 8-□	NBN 8	NBK 8	3.1
-120			120	79				3.2
-165			165	124				3.3
-200			200	159				3.4
-NBS10- 90	1.5 - 10	30	90	49	NBC10-□	NBN10	NBK10	3.2
-120			120	79				3.3
-165			165	124				3.5
-200			200	159				3.7
-NBS13- 90	2.5 - 13	35	90	54	NBC13-□	NBN13	NBK13	3.3
-120			120	79				3.4
-165			165	124				3.7
-200			200	159				3.9
-NBS16- 75	2.5 - 16	42	75	39	NBC16-□	NBN16	NBK16	3.5
- 90			90	54				3.6
-120			120	84				3.9
-165			165	129				4.3
-200			200	164				4.6
-NBS20- 75	2.5 - 20	46	75	39	NBC20-□	NBN20	NBK20	3.5
- 90			90	54				3.7
-120			120	84				4.0
-165			165	129				4.5
-200			200	164				4.8

1. Nut is included. Collet, Wrench & Adjusting Screw must be ordered separately.
 2. Weights do not include a collet.
 3. Other types of shank are also available upon request.

ADJUSTING SCREW

《STANDARD TYPE》

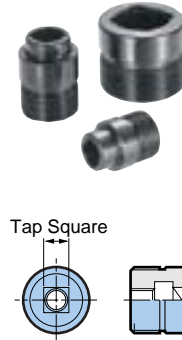
For adjusting cutting tool projection.



Model	G	L	B	Corresponding Chuck Model
NBA 6B	M 7	12	2	NBS 6
NBA 8B	M 9	13	2.5	NBS 8
NBA10B	M 11	16	3	NBS10
NBA13B	M 14	20	4	NBS13
NBA16B	M 18	20	4	NBS16
NBA20B	M 21	20	4	NBS20

《TAP DRIVING BACK STOP》 PAT.

To suit synchronized tapping.



Tap size	Chuck Model		NBS10	NBS13	NBS16	NBS20
	Standard	Tap square	Model	Model	Model	Model
M 8	DIN 371	6.2	NBA10-M 8DD	NBA13-M 8DD	—	—
	JIS	5.0	NBA10-M 8	NBA13-M 8	—	—
M10	DIN 371	8.0	—	NBA13-M10DD	NBA16-M10DD	—
	JIS	5.5	NBA10-M10	NBA13-M10	NBA16-M10	—
M12	DIN 376	7.0	—	NBA13-M12D	NBA16-M12D	NBA20-M12D
	JIS	6.5	—	NBA13-M12	NBA16-M12	NBA20-M12
M14	DIN 376	9.0	—	—	NBA16-M14D . M16D	NBA20-M14D . M16D
	JIS	8.0	—	NBA13-M14	NBA16-M14	NBA20-M14
M16	DIN 376	9.0	—	—	NBA16-M14D . M16D	NBA20-M14D . M16D
	JIS	10.0	—	—	NBA16-M16	NBA20-M16
M20	DIN 376	12.0	—	—	—	NBA20-M20
	JIS	12.0	—	—	—	NBA20-M20

1. Synchronized tapping function must be provided within the machine.

COLLET EJECTOR

For easy assembly or removal of New Baby Collet



Model	Nut Model	Collet Model
NBC 6-CE	NBN 6	NBC 6
NBC 8-CE	NBN 8	NBC 8
NBC10-CE	NBN10	NBC10
NBC13-CE	NBN13	NBC13

Accessories			
NEW BABY WRENCH	COLLET	SEALING NUT BABY PERFECT SEAL	
Model	Model	Model	
NBS 6	NBK 6	NBC 6-□	
NBS 8	NBK 8	NBC 8-□	
NBS10	NBK10	NBC10-□	
NBS13	NBK13	NBC13-□	
NBS16	NBK16	NBC16-□	
NBS20	NBK20	NBC20-□	

Spare Parts	
NUT	α TAPER CLEANER
Model	Model
NBN 6	SC-NBC 6
NBN 8	SC-NBC 8
NBN10	SC-NBC10
NBN13	SC-NBC13
NBN16	SC-NBC16
NBN20	SC-NBC20

NEW BABY CHUCK PAT. Clamping Range : ϕ 0.25 - ϕ 20

BABY PERFECT SEAL PAT. Sealed collet nut for coolant-through tools

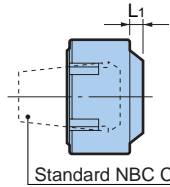


MAX. COOLANT PRESSURE
7MPa

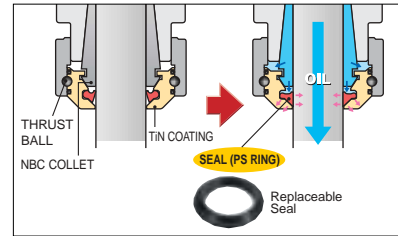
Model Description

BPS 6 - 03035

- Tool Shank Dia. Clamping Range : ϕ 3 - ϕ 3.5
- Body Size
- New Baby Perfect Seal



Standard NBC Collet



Model	Cutter Shank Dia.	L1	Collet Model	Model	Cutter Shank Dia.	L1	Collet Model
BPS 6-03035	3 - 3.5	2.3	NBC 6-3 - 3.75	BPS16-03035	3 - 3.5	4.0	NBC16-3 - 4
-0304	3 - 4		-3 - 4.25	-0304	3 - 4		-3 - 4.5
-04045	4 - 4.5		-4 - 4.75	-0405	4 - 5		-4 - 5.5
-0405	4 - 5		-4 - 5.25	-05055	5 - 5.5		-5 - 6
-05055	5 - 5.5		-5 - 5.75	-0506	5 - 6		-5 - 6
-0506	5 - 6		-5 - 6				
BPS 8-03035	3 - 3.5	3.9	NBC 8-3 - 4	-06065	6 - 6.5	4.3	-6 - 7
-0304	3 - 4		-3 - 4.5	-0607	6 - 7		-6 - 7.5
-04045	4 - 4.5		-4 - 5	-07075	7 - 7.5		-7 - 8
-0405	4 - 5		-4 - 5.5	-0708	7 - 8		-7 - 8.5
-05055	5 - 5.5		-5 - 6	-08085	8 - 8.5		-8 - 9
-0506	5 - 6		-5 - 6.5	-0809	8 - 9		-8 - 9.5
BPS 10-03035	3 - 3.5	3.4	NBC10-3 - 4	-09095	9 - 9.5	4.6	-9 - 10
-0304	3 - 4		-3 - 4.5	-0910	9 - 10		-9 - 10.5
-04045	4 - 4.5		-4 - 5	-10105	10 - 10.5		-10 - 11
-0405	4 - 5		-4 - 5.5	-1011	10 - 11		-10 - 11.5
-05055	5 - 5.5		-5 - 6	-11115	11 - 11.5		-11 - 12
-0506	5 - 6		-5 - 6.5	-1112	11 - 12		-11 - 12.5
BPS 13-03035	3 - 3.5	4.1	NBC13-3 - 4	-12125	12 - 12.5	5.1	-12 - 13
-0304	3 - 4		-3 - 4.5	-1213	12 - 13		-12 - 13.5
-04045	4 - 4.5		-4 - 5	-1314	13 - 14		-13 - 14.5
-0405	4 - 5		-4 - 5.5	-1415	14 - 15		-14 - 15.5
-05055	5 - 5.5		-5 - 6	-1516	15 - 16		-15 - 16
-0506	5 - 6		-5 - 6.5				
BPS 20-03035	3 - 3.5	4.3	NBC20-3 - 4	-0607	6 - 7	4.0	-6 - 7.5
-0304	3 - 4		-3 - 4.5	-07075	7 - 7.5		-7 - 8
-04045	4 - 4.5		-4 - 5	-0708	7 - 8		-7 - 8.5
-0405	4 - 5		-4 - 5.5	-08085	8 - 8.5		-8 - 9
-05055	5 - 5.5		-5 - 6	-0809	8 - 9		-8 - 9.5
-0506	5 - 6		-5 - 6.5	-09095	9 - 9.5		-9 - 10
BPS 25-03035	3 - 3.5	4.6	NBC25-3 - 4	-0910	9 - 10	4.6	-9 - 10.5
-0304	3 - 4		-3 - 4.5	-10105	10 - 10.5		-10 - 11
-04045	4 - 4.5		-4 - 5	-1011	10 - 11		-10 - 11.5
-0405	4 - 5		-4 - 5.5	-11115	11 - 11.5		-11 - 12
-05055	5 - 5.5		-5 - 6	-1112	11 - 12		-11 - 12.5
-0506	5 - 6		-5 - 6.5	-12125	12 - 12.5		-12 - 13
BPS 32-03035	3 - 3.5	4.9	NBC32-3 - 4	-1213	12 - 13	5.2	-12 - 13.5
-0304	3 - 4		-3 - 4.5	-1314	13 - 14		-13 - 14.5
-04045	4 - 4.5		-4 - 5	-1415	14 - 15		-14 - 15.5
-0405	4 - 5		-4 - 5.5	-1516	15 - 16		-15 - 16.5
-05055	5 - 5.5		-5 - 6	-1617	16 - 17		-16 - 17.5
-0506	5 - 6		-5 - 6.5	-1718	17 - 18		-17 - 18.5
BPS 42-03035	3 - 3.5	4.2	NBC42-3 - 4	-1819	18 - 19	4.6	-18 - 19.5
-0304	3 - 4		-3 - 4.5	-1920	19 - 20		-19 - 20
-04045	4 - 4.5		-4 - 5				
-0405	4 - 5		-4 - 5.5				
-05055	5 - 5.5		-5 - 6				
-0506	5 - 6		-5 - 6.5				

• 1 pce. of PS Ring is included.

[PS RING]



Model Description

PS - 0304

- PS Ring

• Replaceable seal is installed in the BABY PERFECT SEAL

(Replacement seal is recommended when coolant leaks due to damage of the PS Ring.)

Model	Corresponding BPS Model	Model	Corresponding BPS Model	Model	Corresponding BPS Model
PS-0304	BPS□-03035,0304	PS-0809	BPS□-08085,0809	PS-1314	BPS□-1314
0405	04045,0405	0910	09095,0910	1415	1415
0506	05055,0506	1011	10105,1011	1516	1516
0607	06065,0607	1112	11115,1112	1617	1617
0708	07075,0708	1213	12125,1213	1718	1718
				1819	1819
				1920	1920

1 package contains 5 pcs. (1 size).

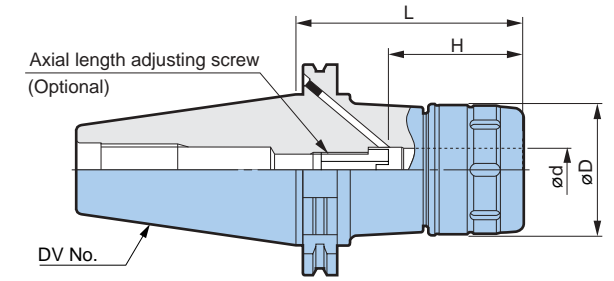
NEW Hi-POWER MILLING CHUCK

For endmills
Clamping Range : ϕ 20 - ϕ 42



Coolant-Through Hole

BIG's original design of slit structure supports heavy and finish end milling with high power and precision.



Plug Screw for flange through coolant

For details of plug screws, please refer to P10.

Model Description

DV40 - HMC 20 - 85

- L Length
- Clamping Dia.
- New Hi-power Milling Chuck system
- DV Shank No.

Model	ϕ d	ϕ D	L	H	Weight (kg)
DV40-HMC20- 85	20	52	85	69 - 79	1.7
- 105			105		1.9
-120			120		2.1
-HMC25- 95	25	62	95	71 - 81	2.0
-105			105		2.2
-HMC32- 95	32	70	95	79 - 84	2.1
-105			105		2.4
-135			135		2.9

1. Wrench and Axial Adjusting Screw should be ordered separately if required.

Model	ϕ d	ϕ D	L	H	Weight (kg)
DV50-HMC20-105	20	60	105	69 - 79	4.6
-135			135		5.2
-HMC25-105			25		62
-135	135	5.3			
-HMC32-105	32	80	105	78 - 95	5.2
-135			135		6.3
-165			165		7.4
-HMC42-105	42	99	105	93 - 105	6.0
-135			135		7.4
-165			165		9.1

Accessories

NEW Hi-POWER MILLING CHUCK	ADJUSTABLE STRAIGHT COLLET	OIL HOLE COLLET
	Model Description AC 20 - 6 • Adjustable Straight Collet	Model Description OCA 20 - 6 • Oil Hole Collet
Model	Model	Model
HMC20	AC20 - 6, 8, 10, 12, 16,	OCA20 - 6, 8, 10, 12, 16
HMC25	AC25 - 6, 8, 10, 12, 16, 20,	OCA25 - 16, 20
HMC32	AC32 - 6, 8, 10, 12, 16, 20, 25	OCA32 - 6, 8, 10, 12, 14, 16, 19, 20, 25
HMC42	AC42 - 6, 8, 10, 12, 16, 20, 25, 32	OCA42 - 6, 8, 10, 12, 14, 16, 19, 20, 24, 25, 31, 32

Accessories

NEW Hi-POWER MILLING CHUCK	C-WRENCH	MEGA WRENCH	ADJUSTING SCREW	Model				
	Model	Model	Model	ϕ D	L	L1	G	W
DV40-HMC20	FK52- 55	MGR52	HMA-M16	19	27	6	M16P1.5	8
-HMC25	FK58- 62	MGR62	HMA-M16	19	27	6	M16P1.5	8
-HMC32	FK68- 75	MGR70	HMA-M16S	19	27	6	M16P1.5	10
DV50-HMC20	FK58- 62	MGR60	HMA-M16	19	27	6	M16P1.5	8
-HMC25	FK58- 62	MGR62	HMA-M16	19	27	6	M16P1.5	8
-HMC32	FK80- 90	MGR80	HMA-M24	30	36	9.5	M24P1.5	10
-HMC42	FK92-100	MGR99	HMA-M24	30	36	9.5	M24P1.5	10