



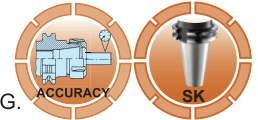
BT-SK Collet Chuck System



JIS STD. 15000 R.P.M. 2.5G

AA

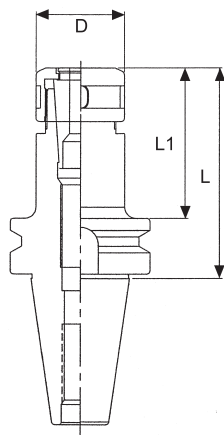
- THE SK CHUCK IS ACCORDING TO THE DESIGN OF ANGEL 8 WITH HIGH ACCURACY AND HIGH GRIPPING RANGE. THE GRIPPING TORQUE IS HIGHER THAN STANDARD ER CHUCK.



- THE DYNAMIC BALANCE OF SK CHUCK CAN BE REACHED 15000RPM X 2.5G.



ORDER NO.	BT TYPE	COLLET TYPE	COLLET SIZE	D	L	L1	WEIGHT (kgs)	CODE NO.
SKB-201	BT-30-SK6-60	SK6	2-6	20	60	38	0.5	3218-600
SKB-202	BT-30-SK6-90	SK6	2-6	20	90	68	0.55	3218-601
SKB-203	BT-30-SK10-60	SK10	2-10	28	60	38	0.5	3218-602
SKB-204	BT-30-SK10-90	SK10	2-10	28	90	68	0.7	3218-603
SKB-205	BT-30-SK16-60	SK16	3-16	40	60	38	0.6	3218-604
SKB-206	BT-30-SK16-90	SK16	3-16	40	90	68	0.7	3218-605
SKB-207	BT-40-SK6-60	SK6	2-6	20	60	33	0.9	3218-606
SKB-208	BT-40-SK6-90	SK6	2-6	20	90	63	1	3218-607
SKB-209	BT-40-SK6-120	SK6	2-6	20	120	93	1.2	3218-608
SKB-210	BT-40-SK10-60	SK10	2-10	28	60	33	1	3218-609
SKB-211	BT-40-SK10-90	SK10	2-10	28	90	63	1.1	3218-610
SKB-212	BT-40-SK10-120	SK10	2-10	28	120	93	1.2	3218-611
SKB-213	BT-40-SK10-150	SK10	2-10	28	150	123	1.3	3218-612
SKB-214	BT-40-SK16-60	SK16	3-16	40	60	33	1.2	3218-613
SKB-215	BT-40-SK16-90	SK16	3-16	40	90	63	1.3	3218-614
SKB-216	BT-40-SK16-120	SK16	3-16	40	120	93	1.4	3218-615
SKB-217	BT-40-SK16-150	SK16	3-16	40	150	123	1.5	3218-616
SKB-218	BT-40-SK20-60	SK20	3-20	50	60	33	1.2	3218-617
SKB-219	BT-40-SK20-90	SK20	3-20	50	90	63	1.3	3218-618
SKB-221	BT-40-SK20-150	SK20	3-20	50	150	123	1.5	3218-620
SKB-222	BT-40-SK25-80	SK25	6-25	55	80	53	1.5	3218-621
SKB-223	BT-40-SK25-100	SK25	6-25	55	100	73	1.65	3218-622
SKB-224	BT-50-SK6-100	SK6	2-6	20	100	62	3.6	3218-623
SKB-225	BT-50-SK6-150	SK6	2-6	20	150	112	4	3218-624
SKB-226	BT-50-SK10-100	SK10	2-10	28	100	62	3.6	3218-625
SKB-227	BT-50-SK10-150	SK10	2-10	28	150	112	4	3218-626
SKB-228	BT-50-SK16-100	SK16	3-16	40	100	62	4	3218-627
SKB-229	BT-50-SK16-150	SK16	3-16	40	150	112	4.5	3218-628
SKB-230	BT-50-SK20-100	SK20	3-20	50	100	62	4.3	3218-629
SKB-231	BT-50-SK20-150	SK20	3-20	50	150	112	5.3	3218-630
SKB-232	BT-50-SK25-100	SK25	6-25	55	100	62	4.5	3218-631
SKB-233	BT-50-SK25-150	SK25	6-25	55	150	112	5.5	3218-632
SKB-234	BT-40-SK13-60L	SK13	3-13	33	60	33	1.1	3218-633
SKB-235	BT-40-SK13-90L	SK13	3-13	33	90	63	1.2	3218-634
SKB-236	BT-40-SK13-120L	SK13	3-13	33	120	93	1.3	3218-635
SKB-237	BT-40-SK13-150L	SK13	3-13	33	150	123	1.4	3218-636



Set Of SK Collet And MAS BT Chuck

DYNAMIC BALANCE TESTED

JIS STD.

15000 R.P.M.

AA



SK COLLET SET

METRIC RANGE SET SIZE
SK06/5pcs : Ø2, 3, 4, 5, 6
SK10/8pcs : Ø3, 4, 5, 6, 7, 8, 9, 10
SK16/8pcs : Ø3, 4, 6, 8, 10, 12, 14, 16
SK20/8pcs : Ø3, 4, 6, 8, 10, 12, 16, 20
SK25/7pcs : Ø6, 8, 10, 12, 16, 20, 25

ORDER NO.	BT TYPE	COLLET TYPE	SET RANGE	COLLET PCS	WEIGHT (kg)	CODE NO.
SKB-301	BT-30-SK6-60L	SK6	2-6	5	1.3	3218-640
SKB-302	BT-30-SK6-90L	SK6	2-6	5	1.45	3218-641
SKB-303	BT-30-SK10-60L	SK10	3-10	8	1.7	3218-642
SKB-304	BT-30-SK10-90L	SK10	3-10	8	1.9	3218-643
SKB-305	BT-30-SK16-60L	SK16	3-16	8	2.5	3218-644
SKB-306	BT-30-SK16-90L	SK16	3-16	8	2.8	3218-645
SKB-307	BT-40-SK6-60L	SK6	2-6	5	2.1	3218-646
SKB-308	BT-40-SK6-90L	SK6	2-6	5	2.3	3218-647
SKB-309	BT-40-SK10-60L	SK10	3-10	8	2.6	3218-648
SKB-310	BT-40-SK10-90L	SK10	3-10	8	2.8	3218-649
SKB-311	BT-40-SK16-60L	SK16	3-16	8	3	3218-650
SKB-312	BT-40-SK16-90L	SK16	3-16	8	3.3	3218-651
SKB-313	BT-40-SK20-60L	SK20	4-20	8	3.8	3218-652
SKB-314	BT-40-SK20-90L	SK20	4-20	8	4.1	3218-653
SKB-315	BT-40-SK25-80L	SK25	6-25	7	4.5	3218-654

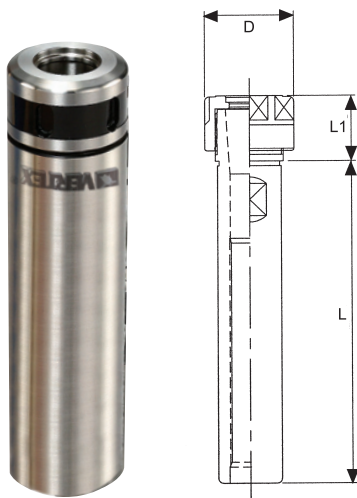


ST-SK Straight Chuck



JIS STD. 15000 R.P.M.

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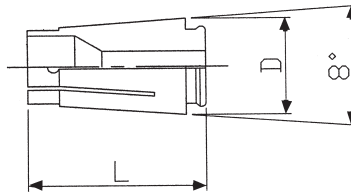
ORDER NO.	TYPE	COLLET	D	L	L1	WEIGHT(kg)	CODE NO.
SKS-210	ST-20-SK6-100	SK6	20	100	20	0.25	3218-660
SKS-211	ST-20-SK6-150	SK6	20	150	20	0.3	3218-661
SKS-212	ST-20-SK10-100	SK10	28	100	20	0.3	3218-662
SKS-213	ST-20-SK10-150	SK10	28	150	20	0.45	3218-663
SKS-214	ST-20-SK10-200	SK10	28	200	20	0.55	3218-664



Set Of SK Collet And Straight Chuck

JIS STD. 15000 R.P.M.

AA



SK COLLET SET

METRIC RANGE SET SIZE

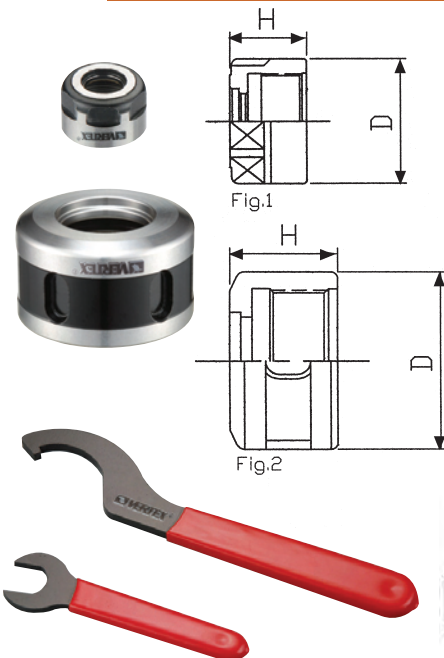
SK06/5pcs : Ø2, 3, 4, 5, 6
SK10/8pcs : Ø3, 4, 5, 6, 7, 8, 9, 10



ORDER NO.	ST TYPE	COLLET	SET RANGE	COLLET SET	WEIGHT (kg)	CODE NO.
SKS-231	ST-20-SK6-100	SK6	2-6	5	0.7	3218-670
SKS-232	ST-20-SK6-150	SK6	2-6	5	0.8	3218-671
SKS-233	ST-20-SK10-100	SK10	3-10	8	1.1	3218-672
SKS-234	ST-20-SK10-150	SK10	3-10	8	1.3	3218-673



SK Nut And Wrench



SK NUT

ORDER NO.	FIG	COLLET TYPE	D	H	WEIGHT (kg)	CODE NO.
SKN-601	1	SK06	19.5	15	0.05	3218-680
SKN-101	1	SK10	28	17	0.05	3218-681
SKN-161	2	SK16	40	24	0.08	3218-682
SKN-201	2	SK20	50	25	0.1	3218-683
SKN-251	2	SK25	55	30	0.12	3218-684

SK WRENCH

ORDER NO.	FIG	COLLET TYPE	A	L	WEIGHT (kg)	CODE NO.
SKW-601	1	SK06	18	130	0.08	3218-690
SKW-101	1	SK10	25	140	0.08	3218-691
SKW-161	2	SK16	X	195	0.2	3218-692
SKW-201	2	SK20	X	228	0.22	3218-693
SKW-251	2	SK25	X	228	0.22	3218-694

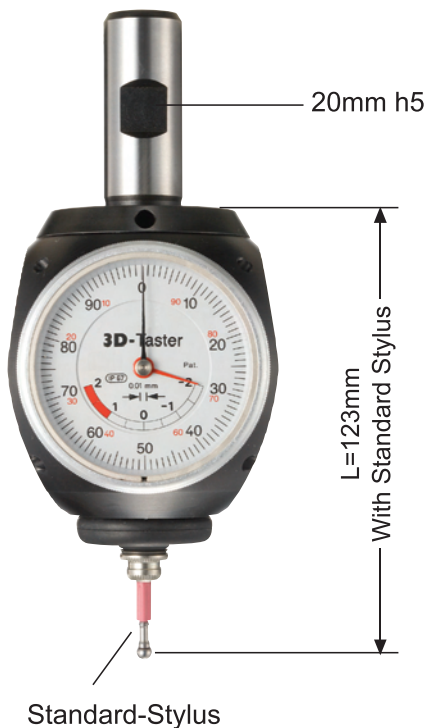


3D-Taster



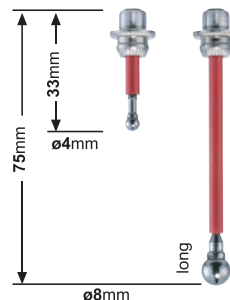
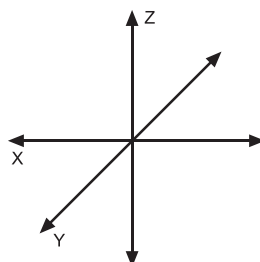
ORDER NO.V-3D

CODE NO.3219-001



Find your exact zero points in all three axes in seconds with the new distance measuring scale (graduated and analogue).

- Black scale for radial deflection.
- Red scale for axial deflection
- Precise and effortless calipering of fixtures and workpiece edges.
- Setting of NC-programme zero points in seconds.
- Measuring of clamped workpieces.
- Generous overrun allowances prevent damage to Taster stylus.
- Easy and precise change of stylus.
- Weight: 0.93 KGS



STYLUS

Change stylus in seconds

No screws or special tools required

Easy precision plug-in mechanism

ORDER NO.	TYPE	WEIGHT	CODE NO.
V-3D-05	ø4x33 standard stylus	10g	3219-005
V-3D-06	ø8x75 long stylus	15g	3219-006

TYPE	ACCURACY
3D-Taster	0.01mm



KNT Type Keyless Drill Chucks

FOR DRILL ONLY , NOT FOR END MILL OR TAP

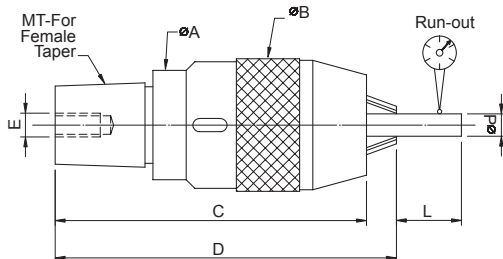


This chuck for CNC keyless drill chuck holders, built by the highest engineering standard.

- Integrated drill chuck and holder once lock with a pull stud, the chuck will never come off.
- Special design ensures high rigidity.
- High service reliability.
- Easy to operate, long service life.
- 100% test and strict quality control assure the highest accuracy.
- 2500R.P.M.

ACCURACY

ITEM NO.	Ød mm	L mm	Max Run-out mm	Torque kgf-cm
KNT-8	3	35	0.05	160
	6			
	8	50		
KNT-13	5	55	0.05	320
	10			
	13	75		
KNT-16	5	55	0.05	480
	10			
	16	80		



ORDER NO.	Clamping Capacity	For Female Taper	ØA	ØB	C	D	E	kg	QTY Pcs/ Cu-Ft	NW/GW Kgs	CODE NO.
KNT-8	0.5-8	MT2	30	35	82.5	90	M6x1.0	0.3	40/0.6	15/16	3033-600
KNT-13	0.5-13	MT2	30	56	76	101	M8x1.25	1	30/0.6	30/31	3033-601
		MT3	38		106	118					3033-601A
KNT-16	3-16	MT3	43	56	115	128	M8x1.25	1.3	18/0.6	24/25	3033-602

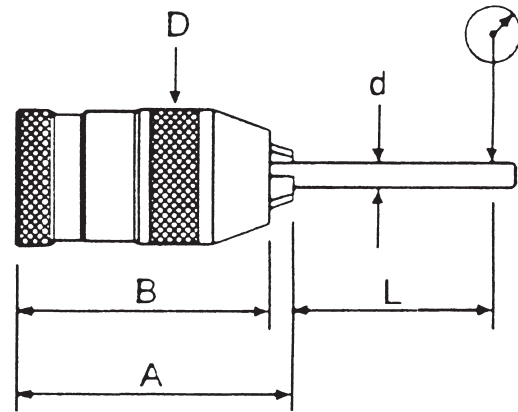


Integrated Type Keyless Drill Chucks



FOR DRILL ONLY , NOT FOR END MILL OR TAP

CAT-TYPE



ORDER NO.	Clamping Capacity		Taper	OUTER Ø / mm	WEIGHT (kgs)	CODE NO.
	mm	inch				
INT-8-CAT30	0.5-8	1/64"-1/8"	CAT30	Ø35	0.8	3301-073
INT-13-CAT30	0.5-13	1/64"-1/2"		Ø51.5	1	3301-074
INT-8-CAT40	0.5-8	1/64"-1/8"	CAT40	Ø35	1.32	3301-075
INT-13-CAT40	0.5-13	1/64"-1/2"		Ø51.5	2.1	3301-076
INT-16-CAT40	3-16	1/8"-5/8"		Ø58	2.26	3301-077
INT-13-CAT50	0.5-13	1/64"-1/2"	CAT50	Ø51.5	3.95	3301-078
INT-16-CAT50	3-16	1/8"-5/8"		Ø58	4.2	3301-079

ACCURACY

ITEM NO.	d mm	L mm	Max Tolerance mm	Torque kgf-cm
INT-8	3	25	0.05	160
	6			
	8	30		
INT-10	3	25	0.05	260
	6			
	10	30		
INT-13	5	30	0.05	400
	10			
	13	25		
INT-16	5	25	0.05	480
	10			
	16	30		

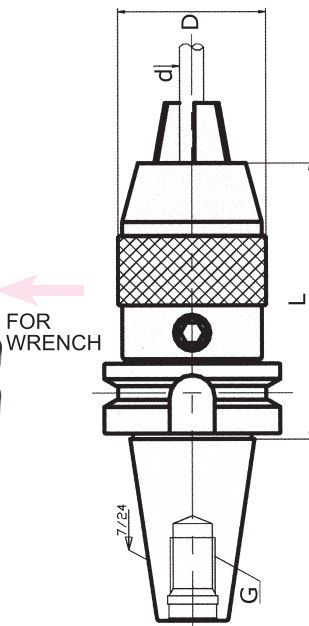
KEYLESS DRILL CHUCK



Integrated Type Keyless Drill Chucks

CAN FOR TAP

RL type keyless drill chuck with BT SHANK
SK SHANK
NT SHANK



- RL type drill has reinforce torque design to increase more clamping capacity.
- Right turn and left turn allowable.
- No sudden drop when stop or suddenly shift to different direction.
- Highest speed 6000rpm.
- Shorten the shank length which is stronger than traditional design improves the total rigidity.

ORDER NO.	Clamping Capacity mm / d	L	D	G	CODE NO.
BT40-VRL13	0.5-13	95	50	M16	3301-090
BT40-VRL16	3-16	113	57	M16	3301-091
SK40-VRL13	0.5-13	85	50	M16	3301-092
SK40-VRL16	3-16	95	57	M16	3301-093
NT40-VRL13	0.5-13	112	50	M16	3301-094
NT40-VRL16	3-16	120	57	M16	3301-095



Integrated Type Keyless Drill Chucks



FOR DRILL ONLY , NOT FOR END MILL OR TAP



FOR SPECIFICATION PLEASE SEE P.C74

The main-shafts is of integrated type, which is much more superior than the traditional design. The major features are as follows:

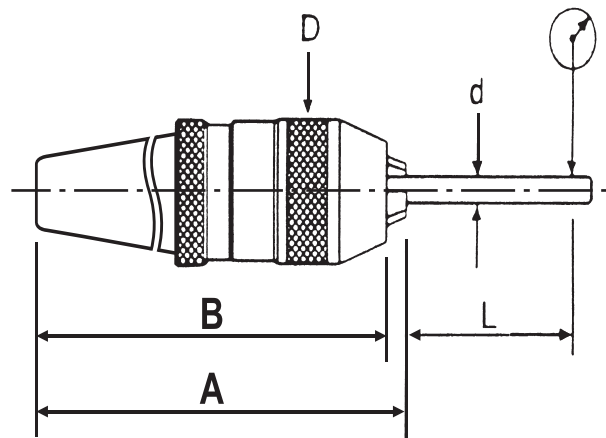
- Extremely rigid construction. Accuracy is same as page C66
- The accumulative tolerances can be reduced to a minimum, since the traditional mechanism requiring an ARBOR to connect the Drill Chucks which will generate the accumulative tolerances. The Integrated type Keyless Drill Chuck is designed to solve this problem totally.
- Prevent the Drill Chucks from falling out.
- Extremely safe in operation.
- 2500 R.P.M.



STANDARD ACCES.

ACCURACY

ITEM NO.	d mm	L mm	Max Tolerance mm	Torque kgf-cm
INT-8	3	25	0.05	160
	6			
	8			
INT-10	3	25	0.05	260
	6			
	10			
INT-13	5	30	0.05	400
	10			
	13			
INT-16	5	25	0.05	480
	10			
	16			





Integrated Type Keyless Drill Chucks



ORDER NO.	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		WEIGHT (kgs)	CODE NO.
	Ø mm	Ø inch			Open B mm	Closed A mm		
INT-8-MT-2	0.5-8	0-5/16"	MT-2	36	150	157	0.8	3301-030
INT-8-JC-20	0.5-8	0-5/16"	JC-20	36	133	141	0.8	3301-031
INT-8-BT30	0.5-8	1/64"-1/8"	BT30	36	126	132	1	3301-070
INT-8-BT40	0.5-8	1/64"-1/8"	BT40	36	142	150	1.5	3301-072
INT-8-NT30	0.5-8	1/64"-1/8"	NT30	36	136	142	0.8	3301-080
INT-8-NT40	0.5-8	1/64"-1/8"	NT40	36	159	166	1.3	3301-081
INT-8-SK40	0.5-8		SK-40	36	149	157	1.4	3301-083
INT-13-R8	1-13	1/64"-1/2"	R8	50	196	205	1.5	3301-032
INT-13-MT2	1-13	0-1/2"	MT-2	50	172	184	1.3	3301-082
INT-13-MT3	1-13	0-1/2"	MT-3	50	190	201	1.4	3301-033
INT-13-MT4	1-13	0-1/2"	MT-4	50	216	227	1.8	3301-034
INT-13-JC-20	1-13	0-1/2"	JC-20	50	153	164	1.4	3301-035
INT-13-JC-25	1-13	0-1/2"	JC-25	50	163	174	1.6	3301-036
INT-13-JC-32	1-13	0-1/2"	JC-32	50	173	185	1.8	3301-037
INT-13-NT30	1-13	0-1/2"	NT-30	50	86	99	1.4	3301-038
INT-13-NT40	1-13	0-1/2"	NT-40	50	85	96	1.8	3301-039
INT-13-BT30	1-13	1/64"-1/2"	BT30	50	96	108	1.4	3301-071
INT-13-BT40	1-13	0-1/2"	BT-40	50	100	111	2	3301-040
INT-13-BT50	1-13	0-1/2"	BT-50	50	106	117	4.7	3301-041
INT-13-NT50	1-13	0-1/2"	NT-50	50	100	112	4.3	3301-059
INT-13-SK30	1-13		SK-30	50	99	111	1.34	3301-084
INT-13-SK40	1-13		SK-40	50	100	113	1.9	3301-085
INT-13-SK50	1-13		SK-50	50	93	106	3.9	3301-087
INT-16-R8	3-16	1/8"-5/8"	R8	57	198	211	1.9	3301-042
INT-16-MT3	3-16	1/8"-5/8"	MT3	57	194	207	1.9	3301-043
INT-16-MT4	3-16	1/8"-5/8"	MT4	57	219	232	2	3301-044
INT-16-JC-20	3-16	1/8"-5/8"	JC-20	57	152	165	1.8	3301-045
INT-16-JC-25	3-16	1/8"-5/8"	JC-25	57	162	178	1.7	3301-046
INT-16-JC-32	3-16	1/8"-5/8"	JC-32	57	184	179	2.2	3301-047
INT-16-NT40	3-16	1/8"-5/8"	NT-40	57	113	126	2.6	3301-049
INT-16-BT40	3-16	1/8"-5/8"	BT-40	57	113	127	2.5	3301-050
INT-16-BT50	3-16	1/8"-5/8"	BT-50	57	111	124	5	3301-051
INT-16-NT50	3-16	1/8"-5/8"	NT-50	57	104	117	4.5	3301-056
INT-16-SK40	3-16	1/8"-5/8"	SK-40	57	127	141	2.4	3301-057
INT-16-SK50	3-16	1/8"-5/8"	SK-50	57	97	110	3.9	3301-058

KEYLESS DRILL CHUCK

ORDER NO.	SIZE DIN 69871A	Clamping range (Ømm)	D	L		WEIGHT (kg)	CODE NO.
				Minimum	Maximum		
INT-8-SK40	SK40-APU08	0.5-8	35.6	149	157	1.4	3301-001
INT-13-SK40	SK40-APU13	1-13	52	100	113	1.9	3301-002
INT-13-SK50	SK50-APU13	1-13	52	93	106	3.9	3301-004
INT-13-SK30	SK30-APU13	1-13	52	99	111	1.34	3301-006
INT-16-SK40	SK40-APU16	3-16	56.8	127	140	2.4	3301-007
INT-16-SK50	SK50-APU16	3-16	56.8	97	110	3.9	3301-008

ORDER NO.	Clamping Capacity		Taper	OUTER Ø / mm	WEIGHT (kgs)	CODE NO.
	mm	inch				
INT-8-CAT30	0.5-8	1/64"-1/8"	CAT30	Ø36	0.8	3301-073
INT-13-CAT30	0.5-13	1/64"-1/2"		Ø50	1	3301-074
INT-8-CAT40	0.5-8	1/64"-1/8"	CAT40	Ø36	1.32	3301-075
INT-13-CAT40	0.5-13	1/64"-1/2"		Ø50	2.1	3301-076
INT-16-CAT40	3-16	1/8"-5/8"	CAT50	Ø57	2.26	3301-077
INT-13-CAT50	0.5-13	1/64"-1/2"		Ø50	3.95	3301-078
INT-16-CAT50	3-16	1/8"-5/8"		Ø57	4.2	3301-079



Keyless Drill Chucks

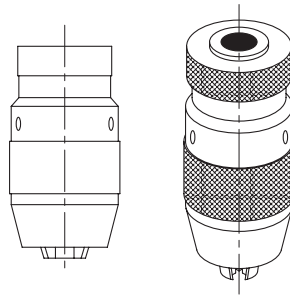


TYPE: XHSP

SPECIAL HEAVY DUTY TYPE

FOR DRILL ONLY , NOT FOR END MILL OR TAP

- Special design & manufacture against for super heavy torque(Clamping capacity) use.
- Owing to inspecting strictly & with excellent RUNOUT Accuracy and quality guanteed the gripping power is double than the general brand.
- Avoid the drill dropped when used in instaneous change of direction and equipped with spanner hole for tightening perfect safety.
- Especially suitable for CNC machining center & milling machine use.
- Accuracy: 50 mm length within 0.05 mm
- The key is optional



OPTIONAL ACCES.

Unit:mm

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	QTY Pcs./ Cu-Ft	N.W/G.W kgs	CODE NO.
		Ø mm	Ø inch			Open B mm	Closed A mm				
11015	8XHSP	0.5-8	0-5 / 16"	B10	34.3	64.8	72.7	320	40/0.6	13/14	3302-002
11016				J1	34.3	64.8	72.7	320	40/0.6	13/14	3302-003
11017				B12	34.3	64.8	72.7	320	40/0.6	13/14	3302-004
11018	10XHSP	1-10	0-3 / 8"	J33	42.4	80.8	91.1	700	40/0.6	28/29	3302-005
11019				J2S	42.4	80.8	91.1	700	40/0.6	28/29	3302-006
11020				B12	42.4	80.8	91.1	700	40/0.6	28/29	3302-007
11021				B16	42.4	80.8	91.1	700	40/0.6	28/29	3302-008
11025	13XHSP	1-13	0-1 / 2"	J6	50.3	93.7	105.3	1030	30/0.6	31/32	3302-009
11026				J33	50.3	93.7	105.3	1035	30/0.6	31/32	3302-010
11027				B16	50.3	93.7	105.3	1030	30/0.6	31/32	3302-011
11028	16XHSP	3-16	1/8 - 5/8"	J6	52	97	110.3	1450	24/0.6	35/36	3302-012
11029				B16	52	96.1	110.3	1450	24/0.6	35/36	3302-013
11030				B18	52	97	110.4	1450	24/0.6	35/36	3302-014
11035				J3	52	100.5	105.3	1450	24/0.6	35/36	3302-015
17000	6XHSP	0.5-6.5	1/64"- 1/4"	B12	34	64.8	72.7	320	40/0.6	13/14	3304-010
17002				J1	34	64.8	72.7	320	40/0.6	13/14	3304-011
17004				B10	34	64.8	72.7	320	40/0.6	13/14	3304-012
11031	Key	13XHSP		OPTIONAL ACCES.							3304-001
11032		16XHSP									3304-002
11033		8XHSP									3304-003
11034		10XHSP									3304-004



Keyless Drill Chucks

TYPE: H

FOR DRILL ONLY , NOT FOR END MILL OR TAP

STANDARD TYPE



Unit:mm

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø mm	Length		Wt g	CODE NO.
		Ø mm	Ø inch			Open B mm	Closed A mm		
11061	6HE	0-6.5	0-1 / 4"	J1	34	64.8	72.7	410	3302-030
11062				B10	34	64.8	72.7	400	3302-031
11063	8HE	0.5-8	0-5 / 16"	J1	34	64.8	72.7	400	3302-032
11064				B10	34	64.8	72.7	400	3302-033
11065	10HE	1-10	0-3 / 8"	J2S	42.5	80.8	91.1	720	3302-034
11066				J33	42.5	80.8	91.1	700	3302-035
11067				B12	42.5	80.8	91.1	720	3302-036
11068				B16	42.5	80.8	91.1	700	3302-037
11070	13HE	1-13	0-1 / 2"	J6	50.5	93.7	105.3	1070	3302-039
11071				J33	50.5	93.7	105.3	1035	3302-040
11072				B16	50.5	93.7	105.3	1080	3302-041
11073	16HE	3-16	1/8 - 5/8"	J6	50.5	93.7	105.8	1070	3302-042
11074				B16	50.5	93.8	105.9	1080	3302-043
11075				B18	50.5	97.7	110	1090	3302-044

- Industrial design especially for life and safety while in operation.
- All hardened parts ensure long term for milling machines and drilling.
- Accuracy: 35 m/m length within 0.08 m/m



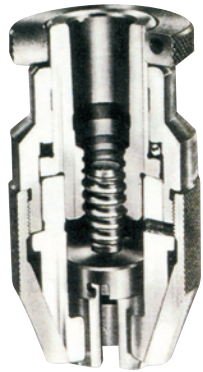
Keyless Drill Chucks



TYPE:S

FOR DRILL ONLY , NOT FOR END MILL OR TAP

HEAVY DUTY TYPE S



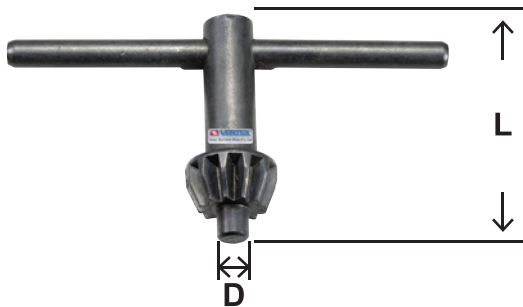
high accuracy and precision design, suitable for CNC machines and machine center. All parts are ground, heat treated, surface treated and under specific QC condition.

ORDER NO.	Size	Capacity		Taper Mount No DIN or Jacobs	Length(m/m)		Outer Dia (m/m)	Weight (g)	CODE NO.
		mm	inch		Open	Closed			
12201-1	8S	0.5-8	0-5/16	JT1	68	76	38	460	3302-060
12201-2				JT2S	68	76	38	450	3302-061
12201-3				B10	68	76	38	420	3302-062
12201-4				B12	68	76	38	450	3302-063
12202-1	10S	1-10	0-3/8	JT2	80	92	43	660	3302-064
12202-2				JT33	80	92	43	630	3302-065
12202-3				B10	80	92	43	640	3302-066
12202-4				B12	80	92	43	670	3302-067
12203-1	13S	1-13	0-1/2	JT33	90	102	49	970	3302-068
12203-2				JT6	90	102	49	1020	3302-069
12203-3				B12	90	102	49	1040	3302-070
12203-4				B16	90	102	49	1030	3302-071
12205-1	16S	3-16	1/8-5/8	JT6	97	110	55	1330	3302-073
12205-2				JT3	97	110	55	1330	3302-074
12205-3				B16	97	110	55	1340	3302-075
12205-4				B18	97	110	55	1360	3302-076

KEYLESS DRILL CHUCK



Keys Steel



ORDER NO.	Type	Dmm	Lmm	Weight(g)	Packing	CODE NO.
14001	T1	3.2	35	20	Plastic Bag	3304-100
14002	T2	4	42	40		3304-101
14003	T3	5.5	44	45		3304-102
14004	T4	6	45	55		3304-103
14005	T5	6.5	45	50		3304-104
14007	T7	8	50	80		3304-106
14008	T8	9.5	65	150		3304-107
14009	T9	11	100	320		3304-108



Note

CAUTIONS



- CAUTIONS:
- ✘ DO NOT USE END MILL AND TAP WITH DRILL CHUCK
 - DRILL CHUCK ONLY CAN PROCESS VERTICAL JOB.
 - ADD COOLANT WHILE HEAVY CUTTING.
 - ✘ WHILE PROCESSING: DO NOT MAKE HORIZONTAL MOVEMENT OR ELSE, IT WILL CAUSE 3 JAWS' DEFORMATION. NOT FOR END MILL.



Key Type Drill Chucks



TYPE: G

HIGH PRECISION



- Remarkable products, super precision durable & rigity
- Big outside diameter suit for heavy duty
- The nut and jaws adopt AISI-52100 (bearing steel) and heat-treated,durability
- Precision can be assured.
- The taper is precision ground.
- Accuracy: 90mm length within 0.08 mm
- With keys



ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	Key Size	QTY Pcs./ Cu-Ft	N.W/G.W kgs	CODE NO.
		mm	inch			Open B mm	Closed A mm					
10006	G-6H	0.5-6.5	1/64"-1/4"	J1	32	41	50	200	T2	100/0.82	20/21	3303-001
10050	G-13XH	0.5-13	1/64"-1/2"	J6	56	70.5	88	800	P6	36/0.83	30/31	3303-006
10051				B16	56	70.5	88	800	P6	36/0.83	30/31	3303-007
10052				J33	56	70.5	88	800	P6	36/0.83	30/31	3303-008
10068	G-16XH	1-16	1/32"-5/8"	J3	65	81	101	1000	P7	24/0.84	24/25	3303-009
10070				B18	65	81	101	1000	P7	24/0.84	24/25	3303-010
10074	G-19XH	3-19	1/8"-3/4"	J4	70	99.5	126	2150	P7	18/0.83	39/40	3303-011



Key Type Drill Chucks



- Suitable for heavy duty & extra heavy duty.
- For milling machine, lathe, drill machine & wood working machine.
- With keys

DRILL CHUCK

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	Female Thread Inch or metric	OUTER Ø / mm	Length		Wt g	Key Size	CODE NO.
		mm	inch				Open B mm	Closed A mm			
10001	4H	0.5-4	1/64"-5/32"	JO		22	29	35	120	T1	3303-060
10003	6H	0.5-6.5	1/64"-1/4"	J1		32	40	50	230	T2	3303-062
10004				B10		32	40	50	190	T2	3303-063
10010	10H	1-10	1/32"-3/8"	J2		38	50.5	64	320	T3	3303-065
10011				J2S		38	50.5	64	320	T3	3303-066
10012				B12		38	50.5	64	330	T3	3303-067
10038	13H	1-13	1/32"-1/2"	J2S		47	65	81	520	T5	3303-071
10038-2					3/8-24	47	65	81	520	T5	3303-071-2
10038-3					1/2-20	47	65	81	330	T5	3303-071-3
10039				J6		47	65	81	570	T5	3303-072
10040				B16		47	65	81	580	T5	3303-073
10041	J33		47	65	81	580	T5	3303-074			
10061	16H	1-16	1/32"-5/8"	J6		56	78	96	990	T7	3303-077
10062				J3		56	78	96	960	T7	3303-078
10063				B16		56	78	96	990	T7	3303-079
10064				B18		56	78	96	970	T7	3303-080
10072	19H	3-19	1/8"-3/4"	B22		67.5	89	126	1660	T8	3303-083
10073				J3		67.5	89	126	1680	T8	3303-084
10046	13XH	1-13	1/32"-1/2"	J6	1/2-20	52	69	82	770	T7	3303-086
10079	19XH	1-19		J4		69	94	132	1720	T8	3303-089

Material Analysis Table

PART NO.	PART NAME	MATERIAL	HEAT TREATED
1	Body	JIS-4051 SAE 1045	HRC45-48
2	Case	JIS-4018 SAE 1018	HRC38-40
3	Jaw	JIS-4051 SAE 1045	HRC52±2
4	Nut	JIS-4051 SAE 1045	HRC61±2

Run-out Accuracy & Torque Inspection Table

Type	4H	5H	6.5H	10H	13H	16H	19H	13XH	19XH
Ødmm	3.5	4.5	6	9	12	15	18	12	18
Lmm	60	80	90	110	140	150	150	140	150
L1mm	40	60	70	85	110	120	120	110	120
Max Run-out	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Torque kg-m	18	20	45	75	85	250	300	190	300