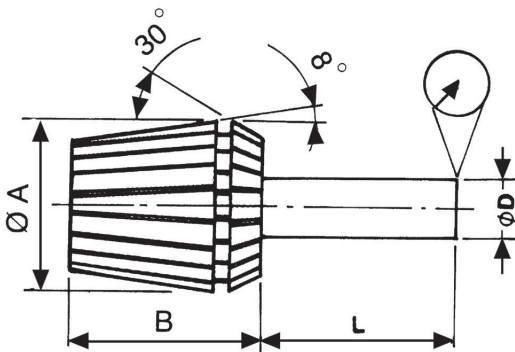




ER collet system of VERTEX is made of special elastic steel material under excellent heat treatment and precise grinding process, so it has precise accuracy, powerful clamping ability, and is durable. This collet can clamp for a specific standard size and its next size, (Refer to the data sheet on page 2). It can be widely used for boring, milling, drilling and tapping as well as for grinding operation, and is available for all sizes.

ER COLLET DIMENSIONS

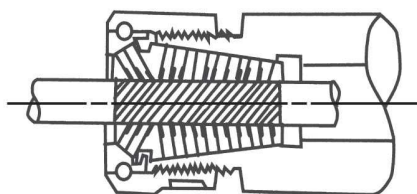
TYPE	A	B
ER-8	8.5	13.5
ER-11	11.5	18
ER-16	17	27
ER-20	21	31
ER-25	26	35
ER-32	33	40
ER-40	41	46
ER-50	52	60



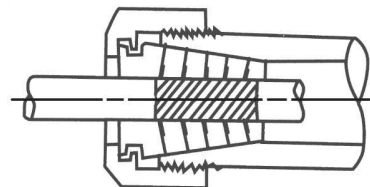
L mm	D mm	DIN6343 Standard precision	VERTEX Standard precision	A Grade Optional
6	1.0-1.4	0.02	0.015	0.01
10	1.5-2.9	0.02	0.015	0.01
16	3.0-5.9	0.02	0.015	0.01
25	6.0-9.9	0.02	0.015	0.01
40	10.0-17.9	0.03	0.02	0.01
50	18.0-26.9	0.03	0.02	0.01
60	27.0-34.9	0.03	0.02	0.01

THE HIGH PRECISION OF A GRADE IS AVAILABLE

double-taper chuck



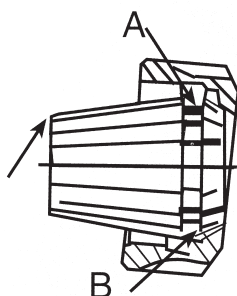
single-taper chuck



POWERFUL CLAMPING STRENGTH

The handle of the drill with double-taper chuck is longer than that with single-taper (grinding spring) collet. The clamping strength will be more powerful, if a screw-driver fastened by steel ball is adopted.

Mounting instructions for ER collets DIN 6499-A and DIN 6499-B



A - Place collet inside nut and rotate the nut to engage with the extractor spiral in collet groove.

B - Only then mount nut and collet together into the collet holder or machine spindle.

Note: Never use a 12-11mm collet to clamp a 12.2mm diameter, but rather use a 13-12mm collet.



ER Spring Collet Chuck System

STANDARD PRECISION TYPE



VERTEX®

DIN 6499



ER COLLET SET WITH CLAMPING RANGE

TYPE	ER-8			ER-11			ER-16			ER-20		
COMPLET SET	9PCS/SET			7PCS/SET			10PCS/SET			12PCS/SET		
FULL SET	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
	V08000	0.5-5.0	3001-101	V11000	0.5-7.0	3002-101	V16000	0.5-10.0	3003-101	V20000	1-13	3004-101
INDIVIDUAL UNIT	V08010	1.0-0.5	3001-001	V11010	1.0-0.5	3002-001	V16010	1.0-0.5	3003-001	V20020	2-1	3004-001
	V08015	1.5-1.0	3001-002	V11020	2.0-1.5	3002-002	V16020	2.0-1.0	3003-002	V20030	3-2	3004-002
	V08020	2.0-1.5	3001-003	V11030	3.0-2.5	3002-003	V16030	3.0-2.0	3003-003	V20040	4-3	3004-003
	V08025	2.5-2.0	3001-004	V11040	4.0-3.5	3002-004	V16040	4.0-3.0	3003-004	V20050	5-4	3004-004
	V08030	3.0-2.5	3001-005	V11050	5.0-4.5	3002-005	V16050	5.0-4.0	3003-005	V20060	6-5	3004-005
	V08035	3.5-3.0	3001-006	V11060	6.0-5.5	3002-006	V16060	6.0-5.0	3003-006	V20070	7-6	3004-006
	V08040	4.0-3.5	3001-007	V11070	7.0-6.5	3002-007	V16070	7.0-6.0	3003-007	V20080	8-7	3004-007
	V08045	4.5-4.0	3001-008	V11015	1.5	3002-008	V16080	8.0-7.0	3003-008	V20090	9-8	3004-008
	V08050	5.0-4.5	3001-009	V11025	2.5	3002-009	V16090	9.0-8.0	3003-009	V20100	10-9	3004-009
				V11035	3.5	3002-010	V16100	10.0-9.0	3003-010	V20110	11-10	3004-010
				V11045	4.5	3002-011	V16015	1.5	3003-011	V20120	12-11	3004-011
				V11055	5.5	3002-012	V16025	2.5	3003-012	V20130	13-12	3004-012
				V11065	6.5	3002-013	V16035	3.5	3003-013	V20010	1.0	3004-013
							V16045	4.5	3003-014	V20025	2.5	3004-014
	Note: APPROXIMATE FOR EACH		WEIGHT (kgs)				V16055	5.5	3003-015	V20035	3.5	3004-015
							V16065	6.5	3003-016	V20045	4.5	3004-016
	ER-8		0.01				V16075	7.5	3003-017	V20055	5.5	3004-017
	ER-11		0.02				V16085	8.5	3003-018	V20065	6.5	3004-018
	ER-16		0.03				V16095	9.5	3003-019	V20075	7.5	3004-019
	ER-20		0.05							V20085	8.5	3004-020
	ER-25		0.07							V20095	9.5	3004-021
	ER-32		0.15							V20105	10.5	3004-022
	ER-40		0.28							V20115	11.5	3004-023
	ER-50		0.54							V20125	12.5	3004-024



ER Spring Collet Chuck System

STANDARD PRECISION TYPE



VERTEX

DIN 6499



ER COLLET SET WITH CLAMPING RANGE

ER-25			ER-32			ER-40			ER-50		
15PCS/SET			18PCS/SET			23PCS/SET			12PCS/SET		
ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
V25000	1-16	3005-101	V32000	2-20	3006-101	V40000	3-26	3007-101	V50000	10-34	3008-101
V25020	2-1	3005-001	V32030	3-2	3006-001	V40040	4-3	3007-001	V50120	12-10	3008-001
V25030	3-2	3005-002	V32040	4-3	3006-002	V40050	5-4	3007-002	V50140	14-12	3008-002
V25040	4-3	3005-003	V32050	5-4	3006-003	V40060	6-5	3007-003	V50160	16-14	3008-003
V25050	5-4	3005-004	V32060	6-5	3006-004	V40070	7-6	3007-004	V50180	18-16	3008-004
V25060	6-5	3005-005	V32070	7-6	3006-005	V40080	8-7	3007-005	V50200	20-18	3008-005
V25070	7-6	3005-006	V32080	8-7	3006-006	V40090	9-8	3007-006	V50220	22-20	3008-006
V25080	8-7	3005-007	V32090	9-8	3006-007	V40100	10-9	3007-007	V50240	24-22	3008-007
V25090	9-8	3005-008	V32100	10-9	3006-008	V40110	11-10	3007-008	V50260	26-24	3008-008
V25100	10-9	3005-009	V32110	11-10	3006-009	V40120	12-11	3007-009	V50280	28-26	3008-009
V25110	11-10	3005-010	V32120	12-11	3006-010	V40130	13-12	3007-010	V50300	30-28	3008-010
V25120	12-11	3005-011	V32130	13-12	3006-011	V40140	14-13	3007-011	V50320	32-30	3008-011
V25130	13-12	3005-012	V32140	14-13	3006-012	V40150	15-14	3007-012	V50340	34-32	3008-012
V25140	14-13	3005-013	V32150	15-14	3006-013	V40160	16-15	3007-013			
V25150	15-14	3005-014	V32160	16-15	3006-014	V40170	17-16	3007-014			
V25160	16-15	3005-015	V32170	17-16	3006-015	V40180	18-17	3007-015			
			V32180	18-17	3006-016	V40190	19-18	3007-016			
			V32190	19-18	3006-017	V40200	20-19	3007-017			
			V32200	20-19	3006-018	V40210	21-20	3007-018			
						V40220	22-21	3007-019			
						V40230	23-22	3007-020			
						V40240	24-23	3007-021			
						V40250	25-24	3007-022			
						V40260	26-25	3007-023			

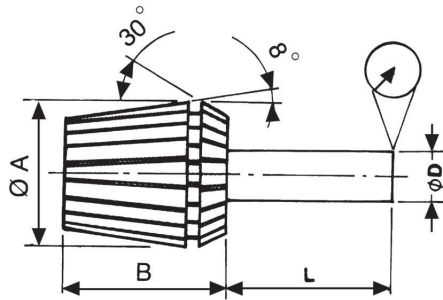


ER Spring Collet Chuck System

SUPER ULTRA PRECISION TYPE



VERTEX®



DIMENSIONS

TYPE	D	H
ER08	8.5	13.5
ER11	11.5	18
ER16	17	27
ER20	21	31
ER25	26	35
ER32	33	40
ER40	41	46
ER50	52	60

S GRADE Accuracy

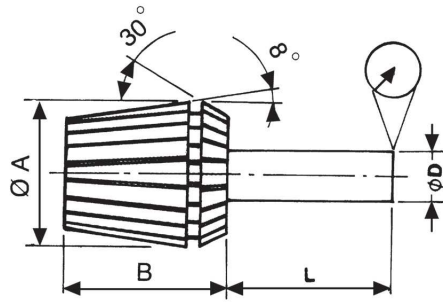
L(mm)	øD(mm)	Ultra Precision(MM)
6	1.0-1.4	0.01
10	1.5-2.9	0.01
16	3.0-5.9	0.01
25	6.0-9.9	0.01
40	10.0-17.9	0.01
50	18.0-26.9	0.01
60	27.0-34.9	0.01

TYPE	ER-8			ER-11			ER-16			ER-20		
COMPLET SET	9PCS/SET			7PCS/SET			10PCS/SET			12PCS/SET		
FULL SET	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
	V08000S	0.5-5.0	3000-001	V11000S	0.5-7.0	3000-002	V16000S	0.5-10.0	3000-003	V20000S	1-13	3000-004
INDIVIDUAL UNIT	V08010S	1.0-0.5	3000-010	V11010S	1.0-0.5	3000-020	V16010S	1.0-0.5	3000-040	V20020S	2-1	3000-060
	V08015S	1.5-1.0	3000-011	V11020S	2.0-1.5	3000-021	V16020S	2.0-1.0	3000-041	V20030S	3-2	3000-061
	V08020S	2.0-1.5	3000-012	V11030S	3.0-2.5	3000-022	V16030S	3.0-2.0	3000-042	V20040S	4-3	3000-062
	V08025S	2.5-2.0	3000-013	V11040S	4.0-3.5	3000-023	V16040S	4.0-3.0	3000-043	V20050S	5-4	3000-063
	V08030S	3.0-2.5	3000-014	V11050S	5.0-4.5	3000-024	V16050S	5.0-4.0	3000-044	V20060S	6-5	3000-064
	V08035S	3.5-3.0	3000-015	V11060S	6.0-5.5	3000-025	V16060S	6.0-5.0	3000-045	V20070S	7-6	3000-065
	V08040S	4.0-3.5	3000-016	V11070S	7.0-6.5	3000-026	V16070S	7.0-6.0	3000-046	V20080S	8-7	3000-066
	V08045S	4.5-4.0	3000-017	V11015S	1.5	3000-027	V16080S	8.0-7.0	3000-047	V20090S	9-8	3000-067
	V08050S	5.0-4.5	3000-018	V11025S	2.5	3000-028	V16090S	9.0-8.0	3000-048	V20100S	10-9	3000-068
				V11035S	3.5	3000-029	V16100S	10.0-9.0	3000-049	V20110S	11-10	3000-069
				V11045S	4.5	3000-030	V16015S	1.5	3000-050	V20120S	12-11	3000-070
				V11055S	5.5	3000-031	V16025S	2.5	3000-051	V20130S	13-12	3000-071
				V11065S	6.5	3000-032	V16035S	3.5	3000-052	V20010S	1.0	3000-072
							V16045S	4.5	3000-053	V20025S	2.5	3000-073
							V16055S	5.5	3000-054	V20035S	3.5	3000-074
							V16065S	6.5	3000-055	V20045S	4.5	3000-075
							V16075S	7.5	3000-056	V20055S	5.5	3000-076
							V16085S	8.5	3000-057	V20065S	6.5	3000-077
							V16095S	9.5	3000-058	V20075S	7.5	3000-078
										V20085S	8.5	3000-079
										V20095S	9.5	3000-080
										V20105S	10.5	3000-081
										V20115S	11.5	3000-082
										V20125S	12.5	3000-083



ER Spring Collet Chuck System

SUPER ULTRA PRECISION TYPE



DIMENSIONS

TYPE	D	H
ER08	8.5	13.5
ER11	11.5	18
ER16	17	27
ER20	21	31
ER25	26	35
ER32	33	40
ER40	41	46
ER50	52	60

S GRADE Accuracy

L(mm)	ØD(mm)	Ultra Precision(MM)
6	1.0-1.4	0.01
10	1.5-2.9	0.01
16	3.0-5.9	0.01
25	6.0-9.9	0.01
40	10.0-17.9	0.01
50	18.0-26.9	0.01
60	27.0-34.9	0.01

ER-25			ER-32			ER-40			ER-50		
15PCS/SET			18PCS/SET			23PCS/SET			12PCS/SET		
ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.	ORDER NO.	CAP. mm Ø	CODE NO.
V25000S	1-16	3000-005	V32000S	2-20	3000-006	V40000S	3-26	3000-007	V50000S	10-34	3000-008
V25020S	2-1	3000-090	V32030S	3-2	3000-110	V40040S	4-3	3000-130	V50120S	12-10	3000-160
V25030S	3-2	3000-091	V32040S	4-3	3000-111	V40050S	5-4	3000-131	V50140S	14-12	3000-161
V25040S	4-3	3000-092	V32050S	5-4	3000-112	V40060S	6-5	3000-132	V50160S	16-14	3000-162
V25050S	5-4	3000-093	V32060S	6-5	3000-113	V40070S	7-6	3000-133	V50180S	18-16	3000-163
V25060S	6-5	3000-094	V32070S	7-6	3000-114	V40080S	8-7	3000-134	V50200S	20-18	3000-164
V25070S	7-6	3000-095	V32080S	8-7	3000-115	V40090S	9-8	3000-135	V50220S	22-20	3000-165
V25080S	8-7	3000-096	V32090S	9-8	3000-116	V40100S	10-9	3000-136	V50240S	24-22	3000-166
V25090S	9-8	3000-097	V32100S	10-9	3000-117	V40110S	11-10	3000-137	V50260S	26-24	3000-167
V25100S	10-9	3000-098	V32110S	11-10	3000-118	V40120S	12-11	3000-138	V50280S	28-26	3000-168
V25110S	11-10	3000-099	V32120S	12-11	3000-119	V40130S	13-12	3000-139	V50300S	30-28	3000-169
V25120S	12-11	3000-100	V32130S	13-12	3000-120	V40140S	14-13	3000-140	V50320S	32-30	3000-170
V25130S	13-12	3000-101	V32140S	14-13	3000-121	V40150S	15-14	3000-141	V50340S	34-32	3000-171
V25140S	14-13	3000-102	V32150S	15-14	3000-122	V40160S	16-15	3000-142			
V25150S	15-14	3000-103	V32160S	16-15	3000-123	V40170S	17-16	3000-143			
V25160S	16-15	3000-104	V32170S	17-16	3000-124	V40180S	18-17	3000-144			
			V32180S	18-17	3000-125	V40190S	19-18	3000-145			
			V32190S	19-18	3000-126	V40200S	20-19	3000-146			
			V32200S	20-19	3000-127	V40210S	21-20	3000-147			
						V40220S	22-21	3000-148			
						V40230S	23-22	3000-149			
						V40240S	24-23	3000-150			
						V40250S	25-24	3000-151			
						V40260S	26-25	3000-152			



COLLET KITS STANDARD TYPE

ORDER NO.	TYPE	COLLET SIZE INSIDE DIA.	PCS/SET	KGS/PACKING	CODE NO.
V-08000	ER-8	1+0.5-5mm(1,1.5,2,2.5,3,3.5,4,4.5,5mm)	9PCS	0.8(C)	3001-101
V-11000	ER-11	1-7mm(1,2,3,4,5,6,7mm)	7PCS	0.3(C)	3002-101
V-11013		1+0.5-7mm(1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7mm)	13PCS	0.3(C)	3002-102
V-16000	ER-16	1-10mm(1,2,3,4,5,6,7,8,9,10mm)	10PCS	0.7(C)	3003-101
V-16008		3-10mm(3,4,5,6,7,8,9,10mm)	8PCS	0.6(C)	3003-102
V-20000	ER-20	2-13mm(2,3,4,5,6,7,8,9,10,11,12,13mm)	12PCS	0.9(C)	3004-101
V-20008		4-13mm(4,5,6,7,8,9,10,11,12,13mm)	10PCS	0.8(C)	3004-102
V-25000	ER-25	2-16mm(2,3,4,5,6,7,8,9,10,11,12,13,14,15,16mm)	15PCS	1.3(W)	3005-101
V-25008		4-16mm(4,5,6,7,8,9,10,11,12,13,14,15,16mm)	13PCS	1.0(W)	3005-102
V-25009		6,8,10,12,16mm	5PCS	0.4(C)	3005-103
V-25010		4,6,8,10,12,14,16mm	7PCS	0.35(C)	3005-104
V-32000	ER-32	3-20mm(3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20mm)	18PCS	3.3(P)	3006-101
V-32008		4,5,6,8,10,12,13,15,16,18,20mm	11PCS	2.8(C)	3006-102
V-32009		6,8,10,12,16,20mm	6PCS	0.9(C)	3006-103
V-40000	ER-40	4-26mm(4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26mm)	23PCS	6.5(P)	3007-101
V-40008		4,5,6,8,10,12,13,15,16,18,20,21,22,25,26mm	15PCS	4.2(P)	3007-102
V-40009		6,8,10,12,16,20,25mm	7PCS	2.0(P)	3007-103
V-50000	ER-50	12,14,16,18,20,22,24,26,28,30,32,34mm	12PCS	6.5(W)	3008-101



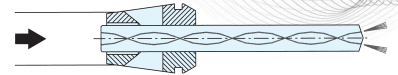
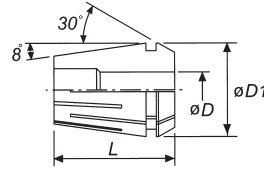
ER-Type Coolant Collet



VERTEX®



Coolant Collet



THE SLOT WITH RUBBER FOR WATER RESIST.
THE OTHER ARE BY UNTHROUGH SLOT TYPE
FOR WATER RESIST.

TYPE:ER-16

ORDER NO.	CAP.mmØ	CODE NO.
V16040L	4.0-3.0	3000-200
V16050L	5.0-4.0	3000-201
V16060L	6.0-5.0	3000-202
V16070L	7.0-6.0	3000-203
V16080L	8.0-7.0	3000-204
V16090L	9.0-8.0	3000-205
V16100L	10.0-9.0	3000-206

TYPE:ER-20

ORDER NO.	CAP.mmØ	CODE NO.
V20040L	4-3	3000-210
V20050L	5-4	3000-211
V20060L	6-5	3000-212
V20070L	7-6	3000-213
V20080L	8-7	3000-214
V20090L	9-8	3000-215
V20100L	10-9	3000-216
V20110L	11-10	3000-217
V20120L	12-11	3000-218
V20130L	13-12	3000-219

TYPE:ER-25

ORDER NO.	CAP.mmØ	CODE NO.
V25040L	4-3	3000-221
V25050L	5-4	3000-222
V25060L	6-5	3000-223
V25070L	7-6	3000-224
V25080L	8-7	3000-225
V25090L	9-8	3000-226
V25100L	10-9	3000-227
V25110L	11-10	3000-228
V25120L	12-11	3000-229
V25130L	13-12	3000-230
V25140L	14-13	3000-231
V25150L	15-14	3000-232
V25160L	16-15	3000-233

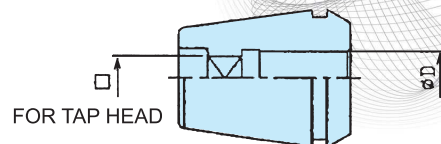
TYPE:ER-32

ORDER NO.	CAP.mmØ	CODE NO.
V32040L	4-3	3000-240
V32050L	5-4	3000-241
V32060L	6-5	3000-242
V32070L	7-6	3000-243
V32080L	8-7	3000-244
V32090L	9-8	3000-245
V32100L	10-9	3000-246
V32110L	11-10	3000-247
V32120L	12-11	3000-248
V32130L	13-12	3000-249
V32140L	14-13	3000-250
V32150L	15-14	3000-251
V32160L	16-15	3000-252
V32170L	17-16	3000-253
V32180L	18-17	3000-254
V32190L	19-18	3000-255
V32200L	20-19	3000-256

TYPE:ER-40

ORDER NO.	CAP.mmØ	CODE NO.
V40040L	4-3	3000-260
V40050L	5-4	3000-261
V40060L	6-5	3000-262
V40070L	7-6	3000-263
V40080L	8-7	3000-264
V40090L	9-8	3000-265
V40100L	10-9	3000-266
V40110L	11-10	3000-267
V40120L	12-11	3000-268
V40130L	13-12	3000-269
V40140L	14-13	3000-270
V40150L	15-14	3000-271
V40160L	16-15	3000-272
V40170L	17-16	3000-273
V40180L	18-17	3000-274
V40190L	19-18	3000-275
V40200L	20-19	3000-276
V40210L	21-20	3000-277
V40220L	22-21	3000-278
V40230L	23-22	3000-279
V40240L	24-23	3000-280
V40250L	25-24	3000-281
V40260L	26-25	3000-282

NEW



øD mm	mm	TAP SIZE		ER16GB	ER20GB	ER25GB	ER32GB	ER40GB
		DIN	JIS	ORDER NO. CODE NO.	ORDER NO. CODE NO.	ORDER NO. CODE NO.	ORDER NO. CODE NO.	ORDER NO. CODE NO.
4.5	3.4	M6		GB160450 3000-400	GB200450 3000-420	GB250450 3000-440	GB320450 3000-460	
5	4		M4	GB160500 3000-401	GB200500 3000-421	GB250500 3000-441	GB320500 3000-461	
5.5	4.5		M5	GB160550 3000-402	GB200550 3000-422	GB250550 3000-442	GB320550 3000-462	
6	4.5		M6 1/4U	GB160600 3000-403	GB200600 3000-423	GB250600 3000-443	GB320600 3000-463	GB400600 3000-490
6	4.9	M8		GB160601 3000-404	GB200601 3000-424	GB250601 3000-444	GB320601 3000-464	GB400601 3000-491
6.1	5		5/16U	GB160610 3000-405	GB200610 3000-425	GB250610 3000-445	GB320610 3000-465	GB400610 3000-492
6.2	5		M8	GB160620 3000-406	GB200620 3000-426	GB250620 3000-446	GB320620 3000-466	GB400620 3000-493
7	5.5	M10	M10 3/8U	GB160700 3000-407	GB200700 3000-427	GB250700 3000-447	GB320700 3000-467	GB400700 3000-494
8	6.2		7/16U	GB160800 3000-408	GB200800 3000-428	GB250800 3000-448	GB320800 3000-468	GB400800 3000-495
8.5	6.5		M12		GB200850 3000-429	GB250850 3000-449	GB320850 3000-469	GB400850 3000-496
9	7.1	M12	1/2U		GB200900 3000-430	GB250900 3000-450	GB320900 3000-470	GB400900 3000-497
10	8				GB201000 3000-431	GB251000 3000-451	GB321000 3000-471	GB401000 3000-498
10.5	8		M14 9/16U			GB251050 3000-452	GB321050 3000-472	GB401050 3000-499
11	9	M14				GB251100 3000-453	GB321100 3000-473	GB401100 3000-500
12	9	M16	5/8U			GB251200 3000-454	GB321200 3000-474	GB401200 3000-501
12.5	10		M16			GB251250 3000-455	GB321250 3000-475	GB401250 3000-502
14	11	M18	M18 3/4U				GB321400 3000-476	GB401400 3000-503
15	12		M20				GB321500 3000-477	GB401500 3000-504
16	12	M20					GB321600 3000-478	GB401600 3000-505
17	13		M22 7/8U				GB321700 3000-479	GB401700 3000-506
18	14.5	M22						GB401800 3000-507
19	15		M24					GB401900 3000-508
20	15		M27 1"U					GB402000 3000-509
20	16	M27						GB402001 3000-510
22	18	M30						GB402200 3000-511



ER Spring Collet Chuck System

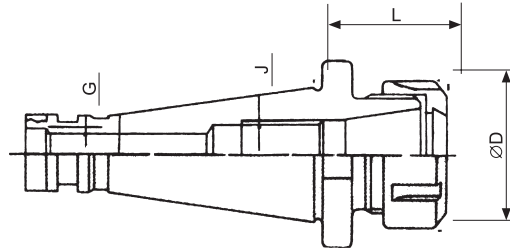
Collet Chuck Kit With ISO Taper Shank

DIN 2080/ISO SHANK

DIN 6499



VERTEX



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KGS	CODE NO.
V-101	NT-30	ER-32	55	50	1/2"-12W, M12X1.75P (USA 1/2"-UNC13)	0.7	3020-301
V-102		ER-40	70	63		1.1	3020-302
V-103	NT-40	ER-32	50	60	5/8"-11W or M16X2.0P	1.1	3021-301
V-104		ER-40	60	63		1.3	3021-302
V-105		ER-50	80	78		2	3021-303
V-106	NT-50	ER-32	60	50	1"-8W or M24X3.0P	3.1	3022-301
V-107		ER-40	65	63		3.4	3022-302
V-108		ER-50	65	78		4	3022-303
※ V-109	NT-30	ER-25	55	42	1/2"-12W, M12X1.75P	0.7	3020-303
※ V-110	NT-40	ER-25	50	42	5/8"-11W, M16X2.0P	1.1	3023-304



Collet Chuck kit With ISO Taper Shank

Including shank, full set of collets, wrench and case.

Caution:

Please notify the taper size, collte type, set range, and set numbers when ordering.

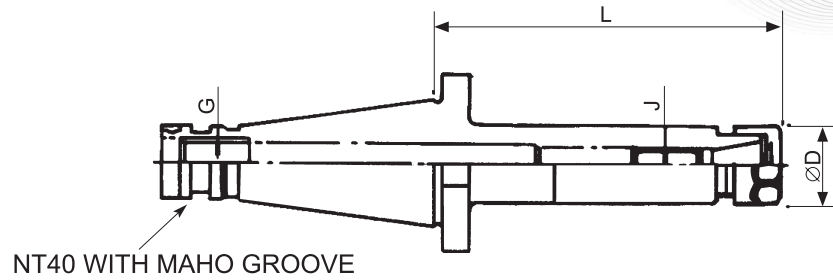
ORDER NO.	TAPER	COLLET TYPE	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-201	NT-30	ER-32	3-20	18	4.2	3020-401
V-202			4-20	11	3.2	3020-402
V-203			6-20	6	2.8	3020-403
V-204	NT-30	ER-40	4-26	23	7.3	3020-404
V-205			4-26	15	6	3020-405
V-206			6-25	7	4.6	3020-406
V-207	NT-40	ER-32	3-20	18	4.8	3021-401
V-208			4-20	11	3.8	3021-402
V-209			6-20	6	3.4	3021-403
V-210	NT-40	ER-40	4-26	23	8.2	3021-404
V-211			4-26	15	6.9	3021-405
V-212			6-25	7	5.2	3021-406
V-213	NT-40	ER-50	12-34	12	10	3021-407
V-214	NT-50	ER-32	3-20	18	6.4	3022-401
V-215			4-20	11	5.4	3022-402
V-216			6-20	6	5.5	3022-403
V-217	NT-50	ER-40	4-26	23	9.8	3022-404
V-218			4-26	15	8.5	3022-405
V-219			6-25	7	7	3022-406
V-220	NT-50	ER-50	12-34	12	11	3022-407
※ V-223	NT-30	ER-25	2-16	7	2.8	3020-407
※ V-224			4-16	15	2.4	3020-408
※ V-225	NT-40	ER-25	2-16	7	3.3	3021-409
※ V-226			4-16	15	3.0	3021-410



ER Spring Collet Chuck System

Extended Collet Holder With ISO Shank
DIN 2080/ISO SHANK EXTENDED CHUCK

DIN 6499



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KG	CODE NO.
V-231	NT-30	ER-16	76	28	1/2"-12W, M12X1.75P (USA 1/2"-UNC13)	0.6	3020-304
V-232	NT-40	ER-16	76	28	5/8"-11W or M16X2.0P	1.1	3021-314
V-233		ER-16	100	28		1.2	3021-305
V-234		ER-20	76	34		1.2	3021-306
V-235		ER-20	100	34		1.4	3021-307



Extended Collet Chuck Kit With ISO Shank

Including shank, full set of collets, wrench and case

Caution:

Please notify the taper size, collte type, set range, and set numbers when ordering.

ORDER NO.	TAPER	COLLET TYPE	RANGE	PCS/SET	L	WEIGHT KGS	CODE NO.
V-241	NT-30	ER-16	1-10	10	76	1.9	3020-409
V-242			3-10	8		1.8	3020-410
V-242A		ER-20	2-13	12		1.8	3020-411
V-243	NT-40	ER-16	1-10	10	76	2.2	3021-411
V-244			3-10	8		2.1	3021-412
V-245		ER-16	1-10	10	100	2.4	3021-413
V-246			3-10	8		2.3	3021-414
V-247		ER-20	2-13	12	76	2.3	3021-415
V-248			4-13	10		2.2	3021-416
V-249		ER-20	2-13	12	100	2.6	3021-417
V-250			4-13	10		2.5	3021-418



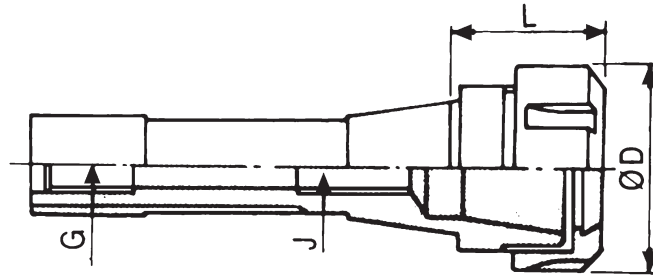
ER Spring Collet Chuck System

Collet Holders With R-8 shank



VERTEX

R-8 SHANK



ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KG	CODE NO.
V-301	R8	ER-16	38	28	7/16"X20 UNF	0.5	3027-301
V-302		ER-32	40	50		0.8	3027-302
V-303		ER-40	70	63		1.3	3027-303



Collet Chuck Kit With R-8 Shank

Including shank, full set of collets, wrench and case.
(ER16 no Wrench)



Caution:

Please notify the taper size, collte type, set range, and set numbers when ordering.

ORDER NO.	TAPER	COLLET TYPE	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-311	R8	ER16	1-10	10	1.5(W)	3027-401
V-312			3-10	8	1.45(P)	3027-402
V-313		ER32	3-20	18	4.3(P)	3027-403
V-314			4-20	11	3.2(P)	3027-404
V-315			6-20	6	2.9(P)	3027-405
V-316		ER40	4-26	23	7.3(P)	3027-406
V-317			4-26	15	6.1(P)	3027-407
V-318			6-25	7	4.6(P)	3027-408



ER Spring Collet Chuck System

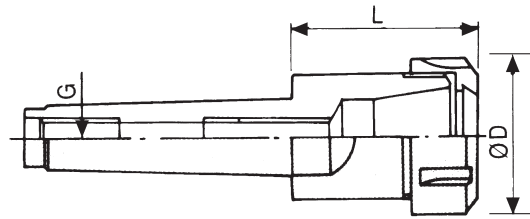
Collet Holders With Morse Taper Shank

DIN 6499 DIN 228

MT-SHANK



VERTEX®



NEW

ORDER NO.	TAPER	COLLET TYPE	L	D	G	WEIGHT KGS	CODE NO.
V-401	MT2	ER16	40	28	3/8"-16W or M10X1.5P	0.2	3023-301
V-402		ER20	43	34		0.3	3023-302
V-403		ER25	47	42		0.4	3023-303
V-404	MT3	ER16	40	28	3/8"-16W or 1/2"-12W	0.3	3024-301
V-405		ER32	70	50		0.8	3024-302
V-406		ER40	80	63	M10X1.5P, M12X1.75P USA 1/2"-UNC13	1.1	3024-303
V-451		ER20	43	34		0.3	3024-304
V-452	MT4	ER25	47	42	1/2"-12NC or M12X1.75P	0.5	3024-305
V-407		ER32	60	50		1	3025-301
V-408		ER40	82	63		1.4	3025-302
V-409	MT5	ER50	85	78	5/8"-11W or M16X2.0P	2.2	3025-303
V-410		ER40	82	63		2.1	3026-301
V-411		ER50	85	78	1"-8W or M24X3.0P	2.9	3026-302

Collet Chuck Kit With Morse Taper Shank

Including shank, full set of collets, wrench and case.

(ER16, ER20 no Wrench)

1. ER16,20,25 Packed in Wooden Box(W)

2.ER32,40,50, Packed in Plastic Box(P)

Caution:

Please notify the taper size, collte type, set range, and set numbers when ordering.



ORDER NO.	TAPER	COLLET TYPE	SET RANGE	SET PCS	WEIGHT KGS.	CODE NO.
V-412	MT2	ER16	1-10	10	1.05	3023-401
V-413		ER16	3-10	8	1	3023-402
V-414		ER20	2-13	12	1.3	3023-403
V-415		ER20	4-13	10	1.2	3023-404
V-416		ER25	2-16	15	2.4	3023-405
V-418	MT3	ER25	4-16	7	1.3	3023-407
V-419		ER16	1-10	10	1.5	3024-401
V-420		ER16	3-10	8	1.1	3024-402
V-441		ER20	2-13	12	1.35	3023-408
V-442		ER20	4-13	10	1.3	3023-409
V-443		ER25	2-16	15	2.5	3023-410
V-444		ER25	4-16	7	2.1	3023-411
V-421		ER32	3-20	18	4.1	3024-403
V-422		ER32	4-20	11	3	3024-404
V-423		ER32	6-20	6	2.7	3024-405
V-424	MT4	ER40	4-26	23	7.2	3024-406
V-425		ER40	4-26	15	6	3024-407
V-426		ER40	6-25	7	4.5	3024-408
V-427		ER32	3-20	18	4.3	3025-401
V-428		ER32	4-20	11	3.2	3025-402
V-429	MT5	ER32	6-20	6	2.9	3025-403
V-430		ER40	4-26	23	7.3	3025-404
V-431		ER40	4-26	15	6.1	3025-405
V-432		ER40	6-25	7	4.6	3025-406
V-433		ER50	12-34	12	9	3025-407
V-434	MT5	ER40	4-26	23	8.2	3026-401
V-435		ER40	4-26	15	6.9	3026-402
V-436		ER40	6-25	7	5.4	3026-403
V-437		ER50	12-34	12	9.5	3026-404



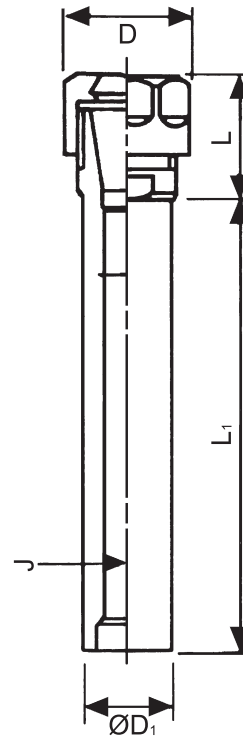
ER Spring Collet Chuck System

Collet Holders With Straight Shank

DIN6499 STRAIGHT
SHANK



VERTEX[®]



NEW

ORDER NO.	COLLET TYPE	SHANK D1XL1	L	D	J	KGS	CODE NO.
V-530	ER11	Ø16X50	21	19	M10	0.1	3007-300
V-531		Ø16X100	21	19	M10	0.2	3007-311
V-532		Ø16X150	21	19	M10	0.3	3007-312
V-501A	ER16	Ø16X100	21	28	M12	0.3	3003-301A
V-501		Ø20X50	30	28	M12	0.2	3003-301
V-502		Ø20X100	30	28	M12	0.3	3003-302
V-503		Ø20X150	30	28	M12	0.4	3003-303
V-504		Ø25X100	30	28	M12	0.5	3003-304
V-504A		Ø25X50	30	28	M12	0.3	3003-306
V-505		Ø25X150	30	28	M12	0.7	3003-305
V-505A		Ø25X200	30	28	M12	0.5	3003-307
V-506	ER20	Ø20X50	36	34	M12	0.3	3004-301
V-507		Ø20X100	36	34	M12	0.3	3004-302
V-508		Ø20X150	36	34	M12	0.5	3004-303
V-509		Ø25X150	36	34	M12	0.7	3004-304
V-509A		Ø25X100	36	34	M12	0.5	3004-305
V-509B		Ø25X50	36	34	M12	0.3	3004-306
V-510	ER25	Ø20X50	46	42	M12	0.4	3005-301
V-511		Ø20X100	46	42	M12	0.5	3005-302
V-512		Ø20X150	46	42	M12	0.6	3005-303
V-513		Ø25X100	46	42	M12	0.6	3005-304
V-514		Ø25X150	46	42	M12	0.7	3005-305
V-515		Ø32X60	46	42	M12	0.6	3005-306
V-516	ER32	Ø25X80	54	50	M12	0.8	3006-301
V-517		Ø32X100	54	50	M12	1.1	3006-302
V-517A		Ø32X150	54	50	M12	1.5	3006-305
V-518		Ø40X100	54	50	M12	1.4	3006-303
V-523	ER40	Ø32X100	55	63	M16	1.5	3007-302
V-524		Ø40X100	55	63	M16	1.8	3007-303



ER Spring Collet Chuck System

DIN 6499 STRAIGHT SHANK



Collet Chuck Kit With Straight Shank

Including shank, full set of collets, wrench and case.

COLLET CHUCK SETS

ORDER NO.	SHANK D1XL1	COLLET TYPE	SET RANGE	SET PCS	KGS	CODE NO.
V-601	Ø20X50L	ER16	1-10	10	0.9	3003-401
V-602	Ø20X50L		3-10	8	0.8	3003-402
V-603	Ø20X100L		1-10	10	1	3003-403
V-604	Ø20X100L		3-10	8	0.9	3003-404
V-605	Ø20X150L		1-10	10	1.1	3003-405
V-606	Ø20X150L		3-10	8	0.5	3003-406
V-607	Ø25X100L		1-10	10	1.1	3003-407
V-607A	Ø25X50L		1-10	10	1.1	3003-411
V-608	Ø25X100L		3-10	8	1.1	3003-408
V-608A	Ø25X50L		3-10	8	1.1	3003-412
V-609	Ø25X150L	ER20	1-10	10	1.3	3003-409
V-610	Ø25X150L		3-10	8	1.3	3003-410
V-611	Ø20X50L		2-13	12	1.2	3004-401
V-612	Ø20X50L		4-13	10	1.2	3004-402
V-613	Ø20X100L		2-13	12	1.2	3004-403
V-614	Ø20X100L		4-13	10	1.2	3004-404
V-615	Ø20X150L		2-13	12	1.4	3004-405
V-615A	Ø25X50L		2-13	12	1.3	3004-409
V-616	Ø20X150L		4-13	10	1.3	3004-406
V-616A	Ø25X50L		4-13	10	1.3	3004-410
V-617	Ø25X100L	ER25	2-13	12	1.4	3004-407
V-617A	Ø25X150L		2-13	12	1.5	3004-411
V-618	Ø25X100L		4-13	10	1.4	3004-408
V-618A	Ø25X150L		4-13	10	1.5	3004-412
V-619	Ø20X50L		2-16	15	2.2	3005-401
V-621	Ø20X50L		4-16	7	1.7	3005-403
V-622	Ø20X100L		2-16	15	2.3	3005-404
V-624	Ø20X100L		4-16	7	1.8	3005-406
V-625	Ø20X150L		2-16	15	2.4	3005-407
V-627	Ø20X150L		4-16	7	2	3005-409
V-628	Ø25X100L	ER32	2-16	15	2.3	3005-410
V-681	Ø16X50L		1-7	13	0.5	3002-401
V-682	Ø16X50L		1-7	7	0.5	3002-402
V-683	Ø16X100L		1-7	13	0.6	3002-403
V-684	Ø16X100L		1-7	7	0.5	3002-404
V-630	Ø25X100L	ER25	6-16	7	2	3005-412
V-631	Ø25X150L		2-16	15	2.6	3005-413
V-633	Ø25X150L		6-16	7	1.9	3005-415
V-634	Ø32X60L		2-16	15	2.5	3005-416
V-636	Ø32X60L		6-16	7	1.9	3005-418
V-637	Ø25X80L	ER40	3-20	18	4.1	3006-401
V-638	Ø25X80L		4-20	11	3	3006-402
V-639	Ø25X80L		3-20	6	2.7	3006-403
V-640	Ø32X100L		4-20	18	4.3	3006-404
V-641	Ø32X100L		6-20	11	3.2	3006-405
V-642	Ø32X100L		6-20	6	2.9	3006-406
V-643	Ø40X100L		3-20	18	4.6	3006-407
V-644	Ø40X100L		4-20	11	3.5	3006-408
V-645	Ø40X100L		6-20	6	3.2	3006-409
V-646	Ø1"X3L		3-20	18	4.1	3006-410
V-647	Ø1"X3L		4-20	11	3	3006-411
V-648	Ø1"X3L	ER40	6-20	6	2.9	3006-412
V-658	Ø32X100L		4-26	23	7.3	3007-404
V-659	Ø32X100L		4-26	15	6.1	3007-405
V-660	Ø32X100L		6-25	7	4.6	3007-406
V-661	Ø40X100L		4-26	23	7.6	3007-407
V-662	Ø40X100L		4-26	15	6.5	3007-408
V-663	Ø40X100L		6-25	7	5	3007-409

- V-603, V-604 are the most popular item.
- THE ER-20/25/32/40 ARE TO BE CONTINUED
- V-613, V-614 are the most popular item.



ER Spring Collet Chuck System

MINI TYPE STRAIGHT SHANK HOLDER

DIN 6499 MINI
STRAIGHT SHANK



VERTEX®

NEW



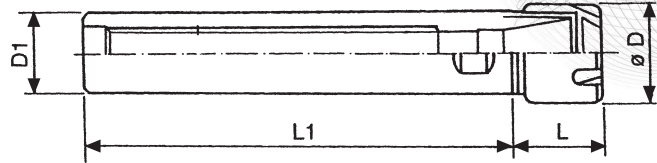
MINI TYPE NUT

Collet Chuck Kit With Straight Shank

Including shank,
full set of collets,
wrench and case.



MINI TYPE NUT



COLLET HOLDER (MINI TYPE)

ORDER NO.	COLLET TYPE	SHANK D1XL1	D	L	KGS	CODE NO.
V-551	ER11M	ST16X50L	16	22	0.1	3011-301
V-552		ST16X100L	16		0.2	3011-302
V-552A		ST16X150L	16		0.3	3011-303
V-553	ER16M	ST20X50L	22	32	0.2	3012-301
V-554		ST20X100L	22		0.3	3012-302
V-555		ST20X150L	22		0.4	3012-303
V-555A		ST20X200L	22		0.4	3012-307
V-556	ER20M	ST20X50L	28	33	0.2	3013-301
V-557		ST20X100L	28		0.3	3013-302
V-558		ST20X150L	28		0.4	3013-303
V-559		ST25X100L	28		0.4	3013-304
V-560	ER16M	ST25X150L	28	32	0.6	3013-305
V-561		ST16X100L	32	22	0.2	3012-304
V-562		ST25X100L	32		0.4	3012-305
V-563		ST25X150L	32		0.6	3012-306
V-563A		ST25X200L	32	32	0.5	3012-308
V-557A	ER20M	ST20X200L	28	35	0.4	3013-306
V-560A		ST25X200L	28		0.5	3013-307

※ For the 50L A side of the shank is milled has flat surface.

MINI TYPE

ORDER NO.	SHANK D1XL1	COLLET TYPE	SET RANGE	SET PCS	KGS	CODE NO.
V-691A	ST16X50L	ER11M	1-7	7	0.5	3011-401
V-691B	ST16X50L		1-7	13	0.5	3011-402
V-692A	ST16X100L		1-7	7	0.6	3011-403
V-692B	ST16X100L		1-7	13	0.6	3011-404
V-693A	ST20X50L	ER16M	1-10	10	0.7	3012-401
V-693B	ST20X50L		3-10	8	1.0	3012-402
V-693C	ST16X100L		1-10	10	0.6	3012-407
V-694A	ST20X100L		1-10	10	0.9	3012-403
V-694B	ST20X100L		3-10	8	1.1	3012-404
V-695A	ST20X150L		1-10	10	1.3	3012-405
V-695B	ST20X150L		3-10	8	1.2	3012-406
V-695C	ST25X100L		1-10	10	1.2	3012-408
V-695D	ST25X150L	ER20M	1-10	10	1.4	3012-409
V-696A	ST20X50L		2-13	12	1.3	3013-401
V-696B	ST20X50L		4-13	10	1.2	3013-402
V-697A	ST20X100L		2-13	12	1.1	3013-403
V-697B	ST20X100L		4-13	10	1.1	3013-404
V-698A	ST20X150L		2-13	12	1.2	3013-405
V-698B	ST20X150L		4-13	10	1.2	3013-406
V-698C	ST25X100L		2-13	12	1.4	3013-407
V-698D	ST25X150L		2-13	12	1.5	3013-408



Clamping Nuts For Collets

ER CLAMPING NUT SYSTEM



VERTEX®

DIN 6499



ER20M



ER16M



ER11MS



ER40KM
WITH A BEARING



ER40UM



ER16UM

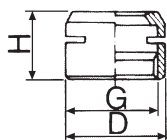


FIG.1 ER11MS

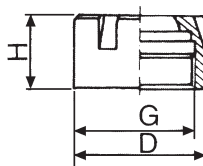


FIG.2 ER11,16,20M
ER8M, 25M

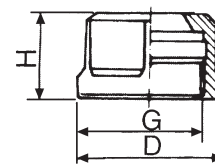


FIG.3 ER11,16,20UM

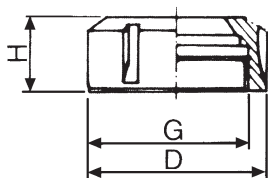


FIG.4 ER25,32,40,50UM

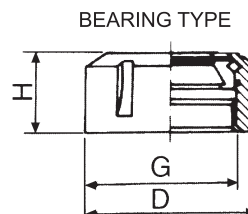


FIG.5 ER40,50KM

CLAMPING NUTS

ORDER NO.	Fig.	COLLET TYPE	D	H	G	WEIGHT KG.	CODE NO.
V-800	3	ER11UM	19	13	M14X0.75P	0.02	3015-001
V-801	3	ER16UM	28	18	M22X1.5P	0.04	3015-002
V-802	3	ER20UM	34	21	M25X1.5P	0.07	3015-003
V-803	4	ER25UM	42	20	M32X1.5P	0.1	3015-004
V-804	4	ER32UM	50	23	M40X1.5P	0.2	3015-005
V-805	4	ER40UM	63	25	M50X1.5P	0.3	3015-006
V-806	4	ER50UM	78	35	M64X2.0P	0.5	3015-007
V-807	1	ER11MS	16	12	M13X0.75P	0.01	3015-008
V-808	2	ER16M	22	18	M19X1.0P	0.02	3015-009
V-809	2	ER20M	28	19	M24X1.0P	0.03	3015-010
V-810A	5	ER40KM	63	29	M50X1.5P	0.4	3015-011
V-810B	5	ER50KM	78	40	M64X2.0P	0.6	3015-012
V-810C	2	ER11M	16	12	M13X0.75P	0.01	3015-013
V-810D	2	ER8M	12	10.8	M10X0.75P	0.01	3015-014
V-810E	2	ER25M	35	20	M30X1.0P	0.6	3015-015



Clamping Wrench For Collets

ER WRENCH SYSTEM

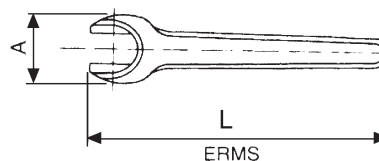


VERTEX

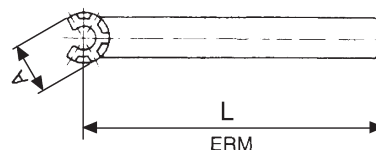
DIN6499



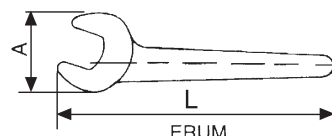
ERMS



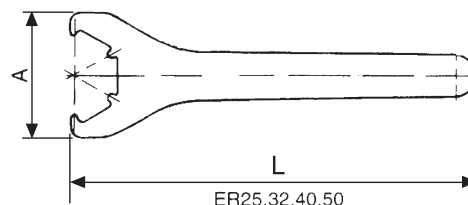
ERM



ERUM11, 16, 20



ERUM25, 32, 40, 50



ORDER NO.	TYPE	A	L	KGS	CODE NO.
V-820	ER11UM	35	135	0.1	3015-100
V-821	ER11MS	22	100	0.04	3015-101
V-822	ER11M	17	95	0.04	3015-102
V-823	ER16M	22.5	118	0.06	3015-103
V-815	ER16UM	44	140	0.2	3015-104
V-824	ER20M	28	130	0.1	3015-105
V-816	ER20UM	53	170	0.2	3015-106
V-811	ER25UM	65	210	0.2	3015-107
V-812	ER32UM	75	250	0.3	3015-108
V-813	ER40UM	90	290	0.5	3015-109
V-814	ER50UM	110	350	0.8	3015-110
V-817	ER8M	13	75	0.02	3015-111
V-818	ER25M	36.5	135	0.1	3015-112



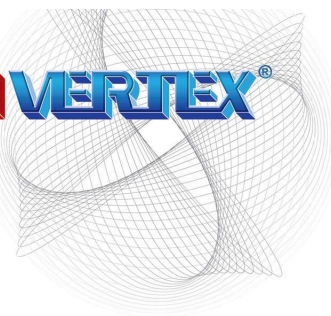
ER Spring Collet Chuck System

Collet Holders With BT Taper Shank
(For CNC Machine Center)
ER-32 ER-40

MAS403 BT-SHANK



VERTEX

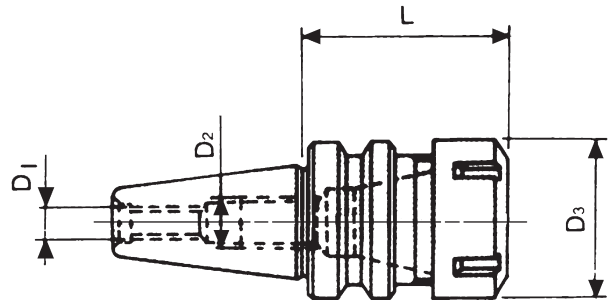


BT-40-ER32



BT-40-ER20M

ACCURACY
RUNOUT 0.005m/m
TAPER SHANK AT-3
R.P.M. 7000



ORDER NO.	TAPER	COLLET TYPE	D1	D2	D3	L	KGS	CODE NO.
V-700	BT30	ER32	M12	M12X1.75P	50	60	0.7	3031-303
V-703A	BT40	ER32	M16X2.0P	M22X1.5P	50	70	1.4	3032-305
V-703B		ER32	M16X2.0P	M22X1.5P	50	100	1.7	3032-306
V-704		ER40	M16X2.0P	M22X1.5P	63	80	1.7	3032-307
V-704B		ER40	M16X2.0P	M22X1.5P	63	100	2	3032-421
V-705	BT50	ER32	M24X3.0P	M28X1.5P	50	100	4.5	3033-305
V-706		ER40	M24X3.0P	M28X1.5P	63	100	4.6	3033-306
V-706B		ER40	M24X3.0P	M28X1.5P	63	150	5.7	3033-307
V-707		ER50	M24X3.0P	M36X1.5P	78	100	5.1	3033-308
V-710	BT30	ER11	M12	M12X1.75P	19	60	0.5	3033-311
V-711		ER11	M12	M12X1.75P	19	100	0.6	3033-312
V-712		ER11M	M12	M12X1.75P	16	100	0.9	3033-313
V-713		ER16	M12	M12X1.75P	28	100	0.8	3033-314
V-714		ER16M	M12	M12X1.75P	22	100	0.7	3033-315
V-715		ER20	M12	M12X1.75P	34	60	0.6	3033-316
V-716		ER20	M12	M12X1.75P	34	100	0.9	3033-317
V-717		ER20M	M12	M12X1.75P	28	100	0.9	3033-318
V-718		ER25	M12	M12X1.75P	42	60	0.7	3033-319
V-719		ER40	M12	M12X1.75P	63	70	1	3033-320
V-720	BT40	ER11	M16	M22X11.5P	19	70	1.2	3033-321
V-721		ER11	M16	M22X11.5P	19	100	1.5	3033-322
V-722A		ER11M	M16	M22X11.5P	16	100	1.2	3033-323
V-723A		ER16M	M16	M22X11.5P	22	100	1.3	3033-324
V-723B		ER16M	M16	M22X11.5P	22	150	1.5	3033-330
V-724A		ER20M	M16	M22X11.5P	28	100	1.6	3033-325
V-724B		ER20M	M16	M22X11.5P	28	150	1.6	3033-331
V-725		ER25	M16	M22X11.5P	42	70	1.3	3033-326
V-726		ER25	M16	M22X11.5P	42	100	1.6	3033-327
V-727		ER50	M16	M22X11.5P	78	90	2.2	3033-328



ER Spring Collet Chuck System

Collet Holders With Extension Type BT Taper Shank
ER-16, ER-20

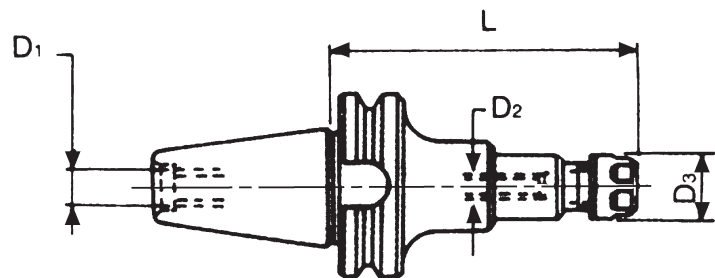


VERTEX[®]



BT-40-ER20

ACCURACY
RUNOUT 0.005m/m
TAPER SHANK AT-3
R.P.M. 7000



ORDER NO.	TAPER	COLLET TYPE	D3	L	D1	WEIGHT KGS	CODE NO.
V-770	BT30	ER16	28	60	M12	0.6	3031-301
V-772	BT40	ER16	28	70	M16	1.2	3032-301
V-773		ER16	28	100	M16	1.4	3032-302
V-774		ER20	34	70	M16	1.3	3032-303
V-774A		ER16	28	150	M16	1.7	3032-308
V-775		ER20	34	100	M16	1.5	3032-304
V-775A		ER20	34	135	M16	1.6	3032-309
V-775B		ER20	34	150	M16	1.9	3032-310
V-775C		ER25	42	150	M16	2.1	3032-311
V-733		ER32	50	150	M16	2	3033-354
V-776	BT50	ER16	28	100	M24	2.3	3033-301
V-777		ER16	28	150	M24	4.3	3033-302
V-778		ER20	34	100	M24	4.1	3033-303
V-779		ER20	34	150	M24	4.8	3033-304
V-743A	BT50	ER16	28	200	M24	7.5	3033-364
V-735		ER20	34	200	M24	5	3033-356
V-736		ER25	42	100	M24	4.3	3033-357
V-737A		ER25	42	150	M24	4.8	3033-358
V-744A		ER25	42	200	M24	8	3033-365
V-738A		ER32	50	150	M24	5.5	3033-359
V-739A		ER32	50	200	M24	6.5	3033-360
V-741A		ER40	63	200	M24	7.5	3033-362
V-742A		ER50	78	150	M24	6.7	3033-363



ER Spring Collet Chuck System

MAS403 BT-SHANK DIN 6499



Collet Chuck Kit With BT Taper Shank

Including shank, full set of collets, wrench and case.

- 1.ER16, ER20 PACKED IN WOODEN BOX
- 2.ER32, ER40, ER50, PACKED IN PLASTIC BOX
- 3.PACKAGE INCLUDING : CHUCK, COLLET, WRENCH, BOX

Caution:

Please notify the taper size, collet type, set range, and set numbers when ordering.

ORDER NO.	BT TAPER	COLLET TYPE	SET RANGE	COLLET PCS	WEIGHT KGS	CODE NO.
V-780	BT30-60L	ER16	1-10	10	1.9	3031-401
V-780A	BT30-100L	ER16	1-10	10	2	3031-406
V-781	BT40-70L	ER16	1-10	10	2.3	3032-401
V-782	BT40-100L	ER16	1-10	10	2.7	3032-402
V-783	BT30-60L	ER20	2-13	12	2.5	3031-402
V-783A	BT30-100L	ER20	2-13	12	2.6	3032-413
V-783B	BT30-60L	ER25	2-16	15	2.5	3032-414
V-783C	BT30-60L	ER25	4-16	7	2.8	3032-415
V-784	BT40-100L	ER20	2-13	12	3	3032-403
V-784A	BT40-70L	ER20	2-13	12	2.8	3032-416
V-784B	BT40-70L	ER25	2-16	15	3.2	3032-417
V-784C	BT40-100L	ER25	4-16	7	3	3032-418
V-785	BT30-60L	ER32	3-20	18	4.4	3031-403
V-786	BT30-60L	ER32	4-20	11	3.8	3031-404
V-787	BT30-60L	ER32	6-20	6	3.4	3031-405
V-788	BT40-70L	ER32	3-20	18	5.2	3032-404
V-789	BT40-70L	ER32	4-20	11	4.2	3032-405
V-790	BT40-70L	ER32	6-20	6	3.8	3032-406
V-791	BT40-100L	ER32	3-20	18	5.7	3032-407
V-792	BT40-100L	ER32	4-20	11	4.7	3032-408
V-793	BT40-100L	ER32	6-20	6	4.3	3032-409
V-794	BT40-80L	ER40	4-26	23	8.9	3032-410
V-795	BT40-80L	ER40	4-26	15	7.6	3032-411
V-796	BT40-80L	ER40	6-25	7	6	3032-412
V-797	BT50-100L	ER40	4-26	23	11.3	3033-401
V-798	BT50-100L	ER40	4-26	15	10	3033-402
V-799	BT50-100L	ER40	6-26	7	8.5	3033-403
V-737	BT50-150L	ER40	4-26	23	12.2	3033-404
V-738	BT50-150L	ER40	4-26	15	11	3033-405
V-739	BT50-150L	ER40	6-26	7	9.5	3033-406
V-740	BT50-100L	ER50	12-34	12	12	3033-407
V-740C	BT40-90L	ER50	12-34	12	9	3033-408
V-740B	BT50-100L	ER32	3-20	18	7.5	3033-409



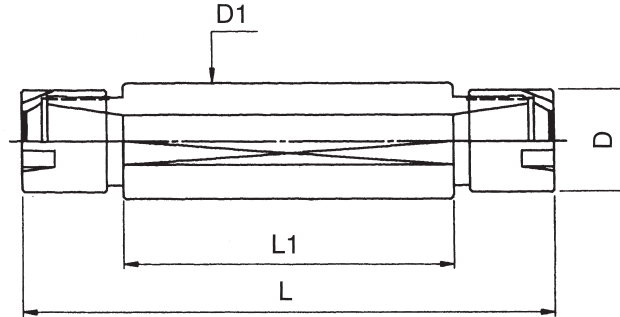
ST/ER Straight Shank With Double Head Spindle



VERTEX®

M TYPE DOUBLE HEAD

FOR CNC LATHE ONLY



ORDER NO.	COLLET TYPE	SHANK (ØD1-ER-L1)	L	L1	D	WEIGHT (KGS)	CODE NO.
V-830	ER11	ø20-ER11M2-50	70	50	16	0.2	3032-430
V-831	ER11	ø20-ER11M2-78	108	78	16	0.3	3032-431
V-832	ER16	ø20-ER16M2-50	82	50	22	0.2	3032-432
V-833	ER16	ø20-ER16M2-70	112	70	22	0.32	3032-433
V-834	ER16	ø25-ER16M2-50	92	50	22	0.25	3032-434
V-835	ER16	ø25-ER16M2-80	122	80	22	0.35	3032-435
V-836	ER20	ø25-ER20M2-50	92	50	28	0.3	3032-436
V-837	ER20	ø25-ER20 M2-80	122	80	28	0.35	3032-437

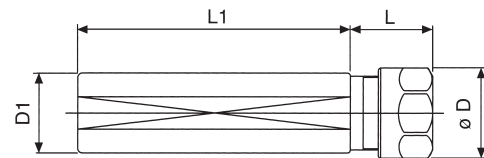


ST/ER Straight Shank With Single Head Spindle

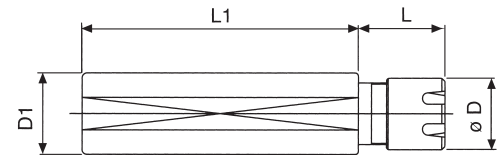
FOR CNC LATHE ONLY

M TYPE SINGLE HEAD

UM TYPE



M TYPE SINGLE HEAD



UM TYPE

ORDER NO.	COLLET TYPE	SHANK (ØD1-ER-L1)	L	L1	D	WEIGHT (KGS)	CODE NO.
V-841	ER16	ø20-ER16M-70	21	70	22	0.2	3032-441
V-842	ER16	ø25-ER16M-70	21	70	22	0.25	3032-442
V-843	ER16	ø3/4"-ER16M-70	21	70	22	0.2	3032-443
V-844	ER16	ø20-ER16UM-70	21	70	28	0.2	3032-444
V-845	ER16	ø25-ER16UM-70	21	70	28	0.25	3032-445
V-846	ER16	ø3/4"-ER16UM-70	21	70	28	0.2	3032-446
V-847	ER20	ø22-ER20UM-70	23	70	34	0.25	3032-447
V-848	ER20	ø25-ER20UM-70	23	70	34	0.3	3032-448



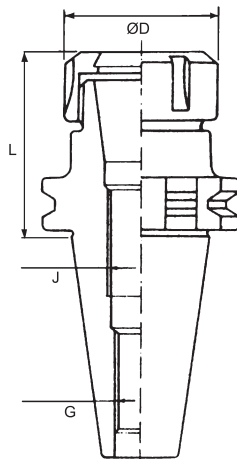
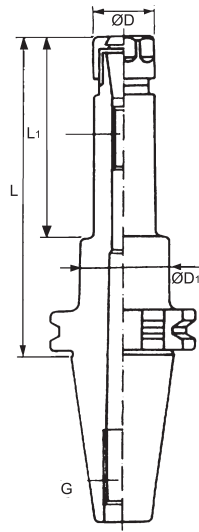
ER-SK Taper Shank

COLLET HOLDER WITH SK-SHANK
DIN 69871



VERTEX

& COLLET CHUCK SET
DIN 69871



COLLET CHUCK KIT WITH SK-SHANK DIN 69871

INCLUDING SHANK, FULL SET OF COLLETS,
WRENCH AND CASE.



ORDER NO.	COLLET TYPE	TAPER	D	L	G	WEIGHT KGS	CODE NO.
V-741	ER16	SK40	28	100	M16	1.5	3029-301
V-741K	ER16	SK30	28	60	M12	0.45	3029-311
V-741B	ER16	SK50	28	100	M24	3.5	3029-317
V-742	ER20	SK40	34	100	M16	1.5	3029-302
V-742K	ER20	SK30	34	60	M12	0.5	3029-312
V-742C	ER16	SK40	28	70	M16	1.1	3029-315
V-742D	ER20	SK40	34	70	M16	1.2	3029-316
V-742E	ER20	SK50	34	100	M24	3.5	3029-318
V-743	ER16	SK50	28	150	M24	4.8	3030-301
V-744	ER20	SK50	34	150	M24	4.8	3030-302

ORDER NO.	COLLET TYPE	TAPER	D	L	G	WEIGHT KGS	CODE NO.
V-745	ER32	SK40	50	70	M16	1.2	3029-303
V-745A	ER32	SK30	50	60	M12	0.8	3029-314
V-745B	ER32	SK50	50	70	M24	3.7	3029-320
V-746	ER40	SK40	63	80	M16	1.6	3029-304
V-747	ER40	SK50	63	100	M24	4.2	3030-303
V-749	ER25	SK40	42	70	M16	1.1	3030-304
V-749A	ER25	SK50	42	100	M24	3.4	3029-319

ORDER NO.	ER TYPE	SK TAPER	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-751	ER16	SK40-70L	1-10	10PCS	2.3	3029-401
V-751A	ER16	SK30-60L	1-10	10PCS	1.8	3029-420
V-752	ER20	SK40-70L	2-13	12PCS	3	3029-402
V-752A	ER20	SK30-60L	2-13	12PCS	2.4	3029-421
V-753	ER32	SK40-70L	3-20	18PCS	5.2	3029-403
V-754	ER32	SK40-70L	4-20	11PCS	4.2	3029-404
V-754A	ER32	SK30-60L	3-20	18PCS	4.2	3029-423
V-754B	ER32	SK50-100L	3-20	18PCS	7	3029-424
V-755	ER32	SK40-60L	6-20	6PCS	3.8	3029-405
V-756	ER40	SK40-80L	4-26	23PCS	8.9	3029-406
V-757	ER40	SK40-80L	4-26	15PCS	7.6	3029-407
V-758	ER40	SK40-80L	6-25	7PCS	6	3029-408
V-759	ER40	SK50-100L	4-26	23PCS	11.3	3030-401
V-760	ER40	SK50-100L	4-26	15PCS	10	3030-402
V-761	ER40	SK50-100L	6-26	7PCS	8.5	3030-403
V-762	ER25	SK40-70L	2-16	15PCS	3.5	3029-409
V-763	ER25	SK40-70L	4-26	7PCS	3.2	3029-410

ER16, ER20 PACKED IN WOODEN CASE
ER32, ER40 PACKED IN PLASTIC CASE

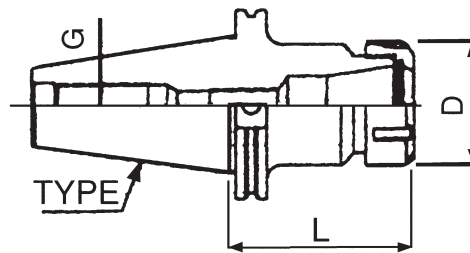


ER Spring Collet Chuck System

COLLET HOLDER WITH CAT-SHANK



VERTEX



ORDER NO.	COLLET TYPE	TAPER	D	L	G	WEIGHT KGS	CODE NO.
V-870	ER16	CAT30	28	2"	1/2"-13	0.8	3034-301
V-871	ER16	CAT40	28	3"	5/8"-11	1.1	3035-301
V-872	ER20		34	3"		1.2	3035-302
V-873	ER25		42	2-1/2"		1.2	3035-303
V-874	ER32		50	2-1/2"		1.2	3035-304
V-875	ER40		63	3"		1.5	3035-305
V-876	ER40	CAT50	63	3-1/2"	1/8"	4	3036-301

COLLET CHUCK KIT WITH CAT-SHANK

INCLUDING SHANK, FULL SET OF COLLET, WRENCH AND CASE.

1. ER16, ER20, ER25 PACKED IN WOODEN BOX.
2. ER32, ER40, PACKED IN PLASTIC BOX.
3. PACKAGE INCLUDING: CHUCK, COLLET, WRENCH, BOX.



ORDER NO.	COLLET TYPE	CAT TAPER	SET RANGE	SET PCS	WEIGHT KGS	CODE NO.
V-878	ER16	CAT40-3"L	1.0-10	10	2.3	3035-401
V-879	ER20	CAT40-3"L	2.0-13	12	2.5	3035-402
V-880	ER25	CAT40-2 1/2"L	2.0-16	15	3	3035-403
V-881		CAT40-2 1/2"L	4.0-16	7	2.8	3035-404
V-882	ER32	CAT40-2 1/2"L	3.0-20	18	5.2	3035-405
V-883		CAT40-2 1/2"L	4.0-20	11	4.2	3035-406
V-884		CAT40-2 1/2"L	6.0-20	6	3.8	3035-407
V-885	ER40	CAT40-3"L	4.0-26	23	8.9	3035-408
V-886		CAT40-3"L	4.0-26	15	7.6	3035-409
V-887		CAT40-3"L	6.0-25	7	6	3035-410
V-888	ER40	CAT50-3 1/2"L	4.0-26	23	11.2	3036-401
V-889		CAT50-3 1/2"L	4.0-26	15	9.8	3036-402
V-890		CAT50-3 1/2"L	6.0-25	7	8.3	3036-403



Milling Chuck



VERTEX

**COLLET HOLDER WITH #25
COLLET CHUCK DIN 6388 TYPE A
OZ-25**

**DIN 6388 # 25 SERIES
DIN 2080 NT-SHANK**



1. Best selected quality tool steel hardened & Precision ground.
2. Accuracy of concentric to within 0.008" per inch. (0.02mm per 25mm)
3. High rigidity & Clamping force.
4. 1 set including 1 chuck shank holder
1 wrench 1 case.
7 or 15 pcs of collet.

CHUCK SHANK ONLY

ORDER NO.	CHUCK SHANK	DRAW BAR THREADS		WEIGHT(kg)		MEAS. CFT	CODE NO.
		SAE	METRIC	SAE	METRIC		
VB-MT-2	MT2	3/8"-16	M10X1.5P	1	1	0.3	3101-001
VB-MT-3	MT3	3/8"-16	M10X1.5P	1.1	1	0.3	3101-002
		1/2"-12	M12X1.75P				
		1/2"-13	M12X1.75P				
VB-MT-4	MT4	5/8"-11	M16X2.0P		1.4	0.3	3101-003
VB-MT-5	MT5	1"-8	M24X3.0P		2	0.5	3101-004
VB-R8	R-8	7/16"-20		1.3		0.3	3101-005
VB-NT30	NT30	1/2"-12	M12X1.75P	1.1	1.1	0.3	3101-006
		1/2"-13	M12X1.75P				
VB-NT40	NT40	5/8"-11	M16X2.0P	1.5	1.5	0.3	3101-007
VB-NT50	NT50	1"-8	M24X3.0P	3.4	3.4	0.5	3101-008

Please Notify the Draw Bar Thread Size When ordering.

FULL SET

ORDER NO.	COLLETS SIZE OZ-25		PCS	WEIGHT (KGS)	CODE NO.
	TAPER	COLLETS			
VB-101	NT30	Inch 1/8"-1" 15PCS 1/4"-1" 7PCS Metric 3mm-25mm 15pcs 6mm-25mm 7pcs	7	3.7	3101-101
VB-102			15	5.2	3101-102
VB-103	NT40		7	4	3101-103
VB-104			15	5.5	3101-104
VB-105	NT50		7	6.5	3101-105
VB-106			15	8.5	3101-106
VB-107	MT3		7	3.3	3101-107
VB-108			15	5.2	3101-108
VB-109	MT4		7	3.9	3101-109
VB-110			15	5.4	3101-110
VB-111	MT5		7	4.7	3101-111
VB-112			15	6.2	3101-112
VB-113	R8		7	3.7	3101-113
VB-114			15	5.2	3101-114
VB-115	MT2		7	3.6	3101-115
VB-116			15	5.1	3101-116

Please Notify the Type Size, Collet Type, Set Range, and Set Numbers When Ordering.

CONTENT COLLET SET SIZE

7 PCS/SET	MM	6, 8, 10, 12, 16, 20, 25MM
	INCH	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"
15 PCS/SET	MM	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 25MM
	INCH	1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"

MILLING COLLET CHUCK KIT

Including Shank, full set of collets, wrench and case.

Collet Chuck Kit



DIN 6388
OZ-25 TYPE

NEW



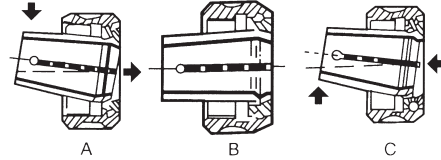
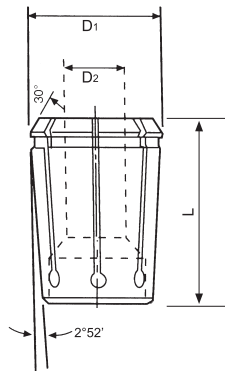
DIN 6388 Collet For Milling Chuck



COLLET DIN 6388, TYPE A

DIN 6388 #16,#25,#32 SERIES

COLLET MUST BE ASSEMBLED INTO THE CLAMPING NUT BEFORE INSERTING INTO THE CHUCK



METRIC

ORDER NO.	D1	L	D2(MM)
OZ-16- □	25.5	40	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
OZ-25- □	35.05	52	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 20, 25
OZ-32- □	44	60	6, 8, 10, 12, 16, 20, 25, 32

INCH

ORDER NO.	D1	L	D2(INCH)
OZ-25- □	35.05	52	1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"
OZ-32- □	43.7	60	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/8", 1 1/4"

■ RANGE SIZE:3-25(1/8"-1")

OZ-25 ■ D:35.05 ■ L:52 ■ TAPER:1:10 ■ WEIGHT:0.18KGS

ORDER NO.	MM SIZE	CODE NO.
OZ-2503	3.0	3100-101
OZ-2504	4.0	3100-102
OZ-2505	5.0	3100-103
OZ-2506	6.0	3100-104
OZ-2507	7.0	3100-105
OZ-2508	8.0	3100-106
OZ-2509	9.0	3100-107
OZ-2510	10	3100-108
OZ-2511	11	3100-109
OZ-2512	12	3100-110
OZ-2513	13	3100-111
OZ-2514	14	3100-112
OZ-2515	15	3100-113
OZ-2516	16	3100-114
OZ-2517	17	3100-115
OZ-2518	18	3100-116
OZ-2519	19	3100-117
OZ-2520	20	3100-118
OZ-2521	21	3100-119
OZ-2522	22	3100-120
OZ-2523	23	3100-121
OZ-2524	24	3100-122
OZ-2525	25	3100-123

ORDER NO.	INCH SIZE	CODE NO.
OZ-2526	1/8"	3100-124
OZ-2527	3/16"	3100-125
OZ-2528	1/4"	3100-126
OZ-2529	5/16"	3100-127
OZ-2530	3/8"	3100-128
OZ-2531	7/16"	3100-129
OZ-2532	1/2"	3100-130
OZ-2533	9/16"	3100-131
OZ-2534	5/8"	3100-132
OZ-2535	11/16"	3100-133
OZ-2536	3/4"	3100-134
OZ-2537	13/16"	3100-135
OZ-2538	7/8"	3100-136
OZ-2539	15/16"	3100-137
OZ-2540	1"	3100-138



DIN 6388 Collet For Milling Chuck



COLLET DIN 6388, TYPE A

DIN 6388 #16,#25,#32 SERIES

COLLET MUST BE ASSEMBLED INTO THE CLAMPING NUT BEFORE INSERTING INTO THE CHUCK



DIN6388 32# **■ RANGE SIZE:6-32(1/4"-1 1/4")**
OZ-32 **■ D:43.7 ■ L:60 ■ TAPER:1:10**
■ WEIGHT:0.25KGS

ORDER NO.	MM SIZE	CODE NO.
OZ-3206	6.0	3100-201
OZ-3207	7.0	3100-202
OZ-3208	8.0	3100-203
OZ-3209	9.0	3100-204
OZ-3210	10	3100-205
OZ-3211	11	3100-206
OZ-3212	12	3100-207
OZ-3213	13	3100-208
OZ-3214	14	3100-209
OZ-3215	15	3100-210
OZ-3216	16	3100-211
OZ-3217	17	3100-212
OZ-3218	18	3100-213
OZ-3219	19	3100-214
OZ-3220	20	3100-215
OZ-3221	21	3100-216
OZ-3222	22	3100-217
OZ-3223	23	3100-218
OZ-3224	24	3100-219
OZ-3225	25	3100-220
OZ-3226	26	3100-221
OZ-3227	27	3100-222
OZ-3228	28	3100-223
OZ-3229	29	3100-224
OZ-3230	30	3100-225
OZ-3231	31	3100-226
OZ-3232	32	3100-227

ORDER NO.	INCH SIZE	CODE NO.
OZ-3233	1/4"	3100-228
OZ-3234	5/16"	3100-229
OZ-3235	3/8"	3100-230
OZ-3236	7/16"	3100-231
OZ-3237	1/2"	3100-232
OZ-3238	9/16"	3100-233
OZ-3239	5/8"	3100-234
OZ-3240	11/16"	3100-235
OZ-3241	3/4"	3100-236
OZ-3242	13/16"	3100-237
OZ-3243	7/8"	3100-238
OZ-3244	15/16"	3100-239
OZ-3245	1"	3100-240
OZ-3246	1-1/8"	3100-241
OZ-3247	1-1/4"	3100-242



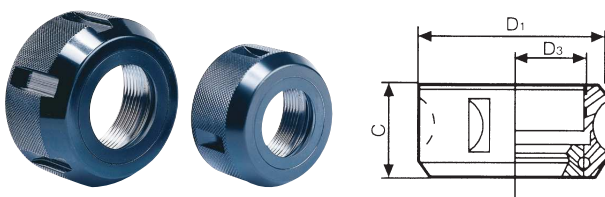
■ DIN 6388 16#
■ OZ-16 COLLET

ORDER NO.	MM SIZE	CODE NO.
OZ-1602	2.0	3100-001
OZ-1603	3.0	3100-002
OZ-1604	4.0	3100-003
OZ-1605	5.0	3100-004
OZ-1606	6.0	3100-005
OZ-1607	7.0	3100-006
OZ-1608	8.0	3100-007
OZ-1609	9.0	3100-008
OZ-1610	10	3100-009
OZ-1611	11	3100-010
OZ-1612	12	3100-011
OZ-1613	13	3100-012
OZ-1614	14	3100-013
OZ-1615	15	3100-014
OZ-1616	16	3100-015



DIN 6388 Nuts & Wrench

BALL BEARING, NUTS FOR COLLETS DIN6388, TYPE A



WRENCH FOR COLLETS DIN6388 TYPE A



Unit:mm

ORDER NO.	C	D1	D3	COLLETS	WEIGHT kgs	CODE NO.
OZ-25N	30	60	M48X2	OZ-25	0.3	3100-301
OZ-32N	33	72	M60X2.5	OZ-32	0.7	3100-302

Unit:mm

ORDER NO.	D1	COLLETS	WEIGHT kgs	CODE NO.
OZ-25W	60	OZ-25	0.35	3100-310
OZ-32W	72	OZ-32	0.4	3100-311



Milling Collet Chuck

OZ-25
COLLET HOLDER WITH BT-SHANK

DIN 6388 # 25 SERIES MAS
403 BT-SHANK



ORDER NO.	TAPER	DIN 6388	L	DRAW BAR	WEIGHT KGS	CODE NO.
VB-BT40	BT40	#25	80	M16X2.0P	1.7	3101-009
VB-BT50	BT50	#25	100	M24X3.0P	4.6	3101-010

Milling Collet Chuck Kit

Including Shank, full set of collets, wrench and case.



METRIC COLLET SYSTEM

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-241	BT40	7	4.4	3101-117
VB-242		15	5.9	3101-118
VB-251	BT50	7	7.5	3101-119
VB-252		15	9.5	3101-120

CONTENT COLLET SET SIZE

METRIC RANGE SET SIZE
7PCS: 6, 8, 10, 12, 16, 20, 25mm
15PCS: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 25mm

INCH COLLET SET SIZE

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-231	BT40	7	4.4	3101-121
VB-232		15	5.9	3101-122
VB-233	BT50	7	7.5	3101-123
VB-234		15	9.5	3101-124

INCH RANGE SET SIZE

7PCS: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"
15PCS: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"



Milling Collet Chuck

COLLET HOLDER WITH BT-SHANK
OZ-32 MAS 403

DIN 6388 # 32 SERIES



ORDER NO.	TAPER	DIN 6388	L	DRAW BAR	WEIGHT KGS	CODE NO.
VB-226	BT40-OZ-32	#32	90	M16X2.0P	2.3	3102-003
VB-227	BT50-OZ-32	#32	100	M24X3.0P	5.1	3102-004
VB-228			150	M24X3.0P	6.8	3102-005

Milling Collet Chuck Kit

Including Shank, full set of collets, wrench and case.

**#32 SERIES BT-TYPE
MAS 403 BT-SHANK**

METRIC COLLET SYSTEM SET

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-243	BT40	8	7.4	3102-109
VB-244		15	9.4	3102-110
VB-253	BT50	8	10	3102-111
VB-254		15	12	3102-112

CONTENT COLLET SET SIZE

METRIC RANGE SET SIZE
8PCS: 6, 8, 10, 12, 16, 20, 25, 32mm
15PCS: 6, 8, 9, 10, 12, 13, 14, 15, 16, 18, 20, 22, 25, 26, 30, 32mm

INCH COLLET SYSTEM SET

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-256	BT40	10	7.4	3102-113
VB-257		15	9.4	3102-114
VB-258	BT50	10	10	3102-115
VB-259		15	12	3102-116

INCH RANGE SET SIZE

10PCS: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4"
15PCS: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/8", 1-1/4"





Milling Collet Chuck

COLLET HOLDER WITH ISO-SHANK
OZ-32

DIN 6388 # 32 SERIES
DIN 2080 NT-SHANK



VERTEX[®]



ORDER NO.	TAPER	DIN 6388	DRAW BAR	WEIGHT KGS	CODE NO.
VB-130	NT30	#32	1.M12X1.75P 2.1/2"-12W	2	3102-006
VB-131	NT40	#32	1.M16X2.0P 2.5/8"-11W	2.2	3102-001
VB-132	NT50	#32	1.M24X3.0P 2.1"-8W	3.9	3102-002

METRIC COLLET SYSTEM

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-121	NT40	8	7.5	3102-101
VB-121B	NT40	15	9.2	3102-102
VB-122	NT50	8	9.8	3102-103
VB-122B	NT50	15	11.8	3102-104
VB-123	NT30	8	7	3102-090
VB-123B	NT30	15	9	3102-091
VB-124	MTB5	8	8	3102-092
VB-124B	MTB5	15	10	3102-093

Milling Collet Chuck Kit

Including Shank, full set of
collets, wrench and case.

OZ-32 DIN 6388

CONTENT COLLET SET SIZE

METRIC RANGE SET SIZE

8PCS: 6, 8, 10, 12, 16, 20, 25, 32mm

15PCS: 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 25, 26, 30, 32mm

INCH COLLET SYSTEM

ORDER NO.	TAPER	PCS/SET	WEIGHT KGS	CODE NO.
VB-162	NT30	10	7	3102-094
VB-162B	NT30	15	9	3102-095
VB-163	NT40	10	7.2	3102-105
VB-164	NT40	15	9.2	3102-106
VB-165	NT50	10	9.8	3102-107
VB-166	NT50	15	11.8	3102-108
VB-167	MTB5	10	8	3102-096
VB-167B	MTB5	15	10	3102-097

INCH RANGE SET SIZE

10PCS: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4"

15PCS: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4",

13/16", 7/8", 15/16", 1", 1-1/8", 1-1/4"





Milling Collet Chuck

COLLET HOLDER WITH
DIN 69871 & CAT TPE

DIN 6388 # 25, #32 SERIES



DIN 69871A & CAT SHANK

ORDER NO.	TAPER	DIN 6388	DRAW BAR	WEIGHT KGS	CODE NO.
VB-261	SK40-OZ25-80L	#25	M16X2.0P	1.6	3101-011
VB-262	SK50-OZ25-100L		M24X3.0P	4.2	3101-012
VB-263	CAT40-OZ25-3"L		5/8"-11W	1.9	3101-013
VB-264	CAT50-OZ25-3 1/2"L		1"-8W	4	3101-014
VB-265	SK40-OZ32-80L	#32	M16X2.0P	2.3	3102-011
VB-266	SK50-OZ32-100L		M24X3.0P	5	3102-012
VB-267	CAT40-OZ32-3"L		5/8"-11W	2.3	3102-013

Milling Collet Chuck Kit

Including Shank, full set of
collets, wrench and case.



METRIC COLLET SYSTEM SET DIN69871A SK-TYPE WITH #25,#32

ORDER NO.	COLLET HOLDER	TYPE	DIN 6388	RANGE	SET PCS	KGS	CODE NO.
VB-271	SK40-OZ25-80L	SK40	#25	3.0-25	15PCS	5.7	3101-125
VB-272	SK40-OZ25-80L		#25	6.0-25	7PCS	4.2	3101-126
VB-273	SK40-OZ32-90L		#32	6.0-32	15PCS	9.2	3101-127
VB-274	SK40-OZ32-90L		#32	6.0-32	8PCS	7.2	3101-128
VB-275	SK50-OZ25-100L	SK50	#25	3.0-25	15PCS	9.3	3101-129
VB-276	SK50-OZ25-100L		#25	6.0-25	7PCS	7.3	3101-130
VB-277	SK50-OZ32-100L		#32	6.0-32	15PCS	11.8	3102-117
VB-278	SK50-OZ32-100L		#32	6.0-32	8PCS	9.8	3102-118

INCH COLLET SYSTEM SET CAT-TYPE WITH #25,#32

ORDER NO.	COLLET HOLDER	TYPE	DIN 6388	RANGE	SET PCS	KGS	CODE NO.
VB-281	CAT40-OZ25-3"L	CAT40	#25	1/8"-1"	15PCS	5.7	3101-131
VB-282	CAT40-OZ25-3"L		#25	1/4"-1"	7PCS	4.2	3101-132
VB-286	CAT40-OZ32-3"L		#32	1/4"-1 1/4"	15PCS	9.2	3102-119
VB-287	CAT40-OZ32-3"L		#32	1/4"-1 1/4"	10PCS	7.2	3102-120
VB-288	CAT50-OZ25-3 1/2"L	CAT50	#25	1/8"-1"	15PCS	9.3	3101-133
VB-289	CAT50-OZ25-3 1/2"L		#25	1/4"-1"	7PCS	7.3	3101-134
VB-290	CAT50-OZ32-3 1/2"L		#32	1/4"-1 1/4"	15PCS	11.8	3102-121
VB-291	CAT50-OZ32-3 1/2"L		#32	1/4"-1 1/4"	10PCS	10	3102-122



Posi-Lock Milling Collet Chuck

COLLET HOLDER WITH MT, R-8, NT TAPER SHANK
POSI-LOCK COLLET TYPE



ORDER NO.	TAPER	WEIGHT KGS	DRAW BAR		CODE NO.
VC-115	MT2	0.7	1.M10x1.5	2.3/8"-16	3203-001
VC-116	MT3	0.9	1.M12x1.75 3.3/8"-16	2.M10X1.5 4.1/2"-12	3203-002
VC-117	MT4	1	1.M16X2.0P	2.5/8"-11	3203-003
VC-118	R8	1	1.7/16"-20UNF		3203-004
VC-123	NT30	1	1.M12X1.75	2.1/2"-12	3203-005
VC-124	NT40	1.2	1.M16X2.0	2.5/8"-11	3203-006
VC-125	NT50	3	1.M24X3.0	2.1"-8	3203-007

EACH COLLET WEIGHT IS 0.09kgs

ORDER NO.	SIZE	CODE NO.
PLI- 1/4	1/4"	3203-130
PLI- 3/8	3/8"	3203-131
PLI- 1/2	1/2"	3203-132
PLI- 5/8	5/8"	3203-133
PLM- 6	6mm	3203-134
PLM- 10	10mm	3203-135
PLM- 12	12mm	3203-136
PLM- 16	16mm	3203-137

POSI-LOCK MILLING COLLET CHUCK KIT

Including Collet Chuck, Full Set of Collets and Wrench Compact design for maximum clearance. Gradual collet taper for powerful clamping action over entire collet. Fast & simple tool changing.



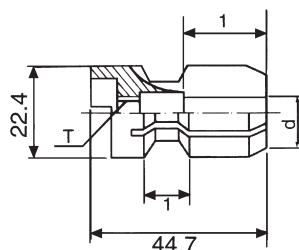
COLLET SET RANGE SIZE

METRIC 4PCS: 6,10,12,16mm
INCH 4PCS: 1/4", 3/8", 1/2", 5/8"
SIZE 8PCS: 6,10,12,16mm, 1/4", 3/8", 1/2", 5/8"

ORDER NO.	TYPER	DRAW BAR	COLLET SIZE	COLLET PCS	WEIGHT KGS	CODE NO.
VC-101	MT2	1. M10x1.5P 2. 3/8"-16	METRIC	4	1.8	3203-101
VC-101I			INCH	4	1.8	3203-102
VC-101A			MM+INCH	8	2.3	3203-103
VC-102	MT3	1. M10x1.5P 2. M12X1.75 3. 3/8"-16 4. 1/2"-12	METRIC	4	2	3203-104
VC-102I			INCH	4	2	3203-105
VC-102A			MM+INCH	8	5	3203-106
VC-103	MT4	1. M16x2.0P 2. 5/8"-11	METRIC	4	2	3203-107
VC-103I			INCH	4	2	3203-108
VC-103A			MM+INCH	8	2.5	3203-109
VC-104	R8	1. 7/16"-20UNF	METRIC	4	2.2	3203-110
VC-104I			INCH	4	2	3203-111
VC-104A			MM+INCH	8	2.5	3203-112
VC-105	NT30	1. M12x1.75P 2. 1/2"-12	METRIC	4	2	3203-113
VC-105I			INCH	4	2	3203-114
VC-105A			MM+INCH	8	2.5	3203-115
VC-106	NT40	1. M16x2.0P 2. 5/8"-11	METRIC	4	2.3	3203-116
VC-106I			INCH	4	2.3	3203-117
VC-106A			MM+INCH	8	2.8	3203-118
VC-107	NT50	1. M24x3.0P 2. 1"-8	METRIC	4	4.3	3203-119
VC-107I			INCH	4	4.3	3203-120
VC-107A			MM+INCH	8	4.8	3203-121



COLLET SIZE
FOR POSI-LOCK



INDIVIDUAL UNIT

ORDER NO.	Q'TY	T	d COLLET SIZE
PL I - □	1PC	5/8"-20TPI	Ø1/4", 3/8", 1/2", 5/8"
PLM - □	1PC	M16-1.25P	Ø6, 10, 12, 16mm

FULL SET

ORDER NO.	COLLET SIZE	WEIGHT (KG)	CODE NO.
VC-111	4pcs - 6,10,12,16mm	0.36	3203-200
VC-112	4pcs - 1/4", 3/8", 1/2", 5/8"	0.36	3203-201
VC-113	8pcs - 6,10,12,16mm, 1/4", 3/8", 1/2", 5/8"	0.72	3230-302



Multi-Lock Milling Chuck


VERTEX®

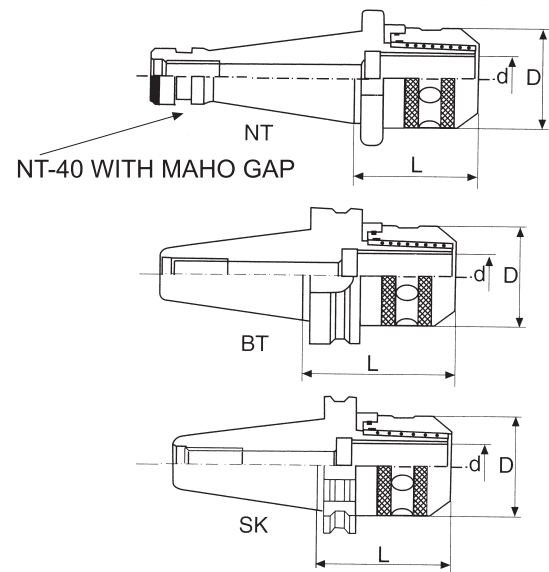
COLLET HOLDER WITH ISO, BT & SK TAPER SHANK

STRAIGHT COLLET TYPE

C-32 C-42

DIN 2080, MAS 403 DIN 69871A

C-20,25,32,42 TYPE



ORDER NO.	TAPER	CHUCK	d	D	L	DRAW BAR	KGS	CODE NO.
VB-431	NT40	NT40-MC32-95L	32	75	95	5/8"-11	3	3202-001
VB-432		NT40-MC32-95L	32	75	95	M16x2.0P	3.1	3202-002
VB-433	NT50	NT50-MC32-100L	32	75	100	1"-8	4.8	3202-003
VB-434		NT50-MC32-100L	32	75	100	M24x3.0P	5.1	3202-004
VB-435A	BT40	BT40-MC32-105L	32	75	105	M16x2.0P	3.2	3202-005
VB-435B		BT40-MC32-150L	32	75	150	M16x2.0P	3.5	3202-020
VB-436	BT50	BT50-MC32-110L	32	75	110	M24x3.0P	5.2	3202-006
VB-437		BT50-MC32-150L	32	75	135	M24x3.0P	7	3202-007
VB-438	NT50	NT50-MC42-110L	42	87	110	1"-8	6	3202-008
VB-439		NT50-MC42-110L	42	87	110	M24x3.0P	6.1	3202-009
VB-440	BT50	BT50-MC42-115L	42	87	115	M24x3.0P	6.1	3202-010
VB-441		BT50-MC42-150L	42	87	140	M24x3.0P	7.8	3202-011
VB-442	SK-40	SK40-MC32-100L	32	75	100	M16x2.0P	3.1	3202-012
VB-443	SK-50	SK50-MC32-105L	32	75	105	M24x3.0P	5.3	3202-013
VB-444A	BT30	BT30-MC20-95	20	52	95	M12x1.75P	1.3	3202-014
VB-446A	BT40	BT40-MC20-80	20	52	80	M16x2.0P	3	3202-016
VB-446B		BT40-MC20-120	20	52	120	M16x2.0P	2.7	3202-017
VB-447A		BT40-MC25-90	25	58	90	M16x2.0P	4.5	3202-018
VB-447B		BT40-MC25-135	25	58	135	M16x2.0P	3.2	3202-019
VB-448A	NT30	NT30-MC20-80	20	52	80	1. M12X1.75P 2. 1/2"-12	1.5	3202-030
VB-448B		NT30-MC25-85	25	58	85	1. M12X1.75P 2. 1/2"-12	1.5	3202-031
VB-449A	NT40	NT40-MC20-80	20	52	80	1. M16X2.0P 2. 5/8"-11	2	3202-032
VB-449B		NT40-MC25-85	25	58	85	1. M16X2.0P 2. 5/8"-11	2	3202-033
VB-450	SK30	SK30-MC20-95	20	52	95	M12X1.75P	1.5	3202-034
VB-451A	SK40	SK40-MC20-80	20	52	80	M16X2.0P	2	3202-035
VB-451B		SK40-MC25-90	25	58	90	M16X2.0P	2	3202-036
VB-452	SK50	SK50-MC42-110	42	87	110	M24X3.0P	5.7	3202-037



Multi-Lock Milling Chuck



VERTEX[®]

MULTI-LOCK MILLING CHUCK KIT

Including shank, full set of collets,
wrench and case.

DIN 2080 NT-SHANK

MAS 403 BT-SHANK

DIN 69871A SK-SHANK



ORDER NO.	TAPER	CHUCK	COLLET	DRAW BAR	KGS	CODE NO.
VB-444I	NT40	NT40-MC32-95L	7PCS	5/8"-11	7	3202-101
VB-444		NT40-MC32-95L	7PCS	M16x2.0P	7	3202-102
VB-454I	NT50	NT50-MC32-100L	7PCS	1"-8	9	3202-103
VB-454		NT50-MC32-100L	7PCS	M24x3.0P	9	3202-104
VB-344A	BT40	BT40-MC32-105L	7PCS	M16x2.0P	7	3202-105
VB-344B		BT40-MC32-150L	7PCS	M16x2.0P	11.5	3202-118
VB-354A	BT50	BT50-MC32-110L	7PCS	M24x3.0P	9.5	3202-106
VB-354B		BT50-MC32-150L	7PCS	M24x3.0P	13	3202-119
VB-554	NT50	NT50-MC42-110L	8PCS	M24x3.0P	12	3202-107
VB-554I		NT50-MC42-110L	8PCS	1"-8	12	3202-108
VB-564A	BT50	BT50-MC42-115L	8PCS	M24x3.0P	12	3202-109
VB-564B		BT50-MC42-150L	8PCS	M24x3.0P	14	3202-109B
VB-565	SK-40	SK40-MC32-100L	7PCS	M16x2.0P	7	3202-110
VB-566	SK-50	SK50-MC32-105L	7PCS	M24x3.0P	9.5	3202-111
VB-567	BT-30	BT30-MC20-95	6PCS	M12x1.75P	6	3202-112
VB-569A	BT-40	BT40-MC20-80	6PCS	M16x2.0P	7	3202-114
VB-569B		BT40-MC20-120	6PCS	M16x2.0P	8	3202-115
VB-570A		BT40-MC25-90	7PCS	M16x2.0P	9.5	3202-116
VB-570B		BT40-MC25-135	7PCS	M16x2.0P	10.5	3202-117
VB-571	NT30	NT30-MC20-80L	6PCS	1. M12X1.75P 2. 1/2"-12	4	3202-120
VB-572		NT30-MC25-85L	7PCS	1. M12X1.75P 2. 1/2"-12	4	3202-121
VB-573	NT40	NT40-MC20-80L	6PCS	1. M16X2.0P 2. 5/8"-11	4.5	3202-122
VB-574		NT40-MC25-85L	7PCS	1. M16X2.0P 2. 5/8"-11	4.5	3202-123
VB-575	SK30	SK30-MC20-95L	6PCS	M12X1.75P	4	3202-124
VB-576	SK40	SK40-MC20-80L	6PCS	M16X2.0P	4.5	3202-125
VB-577		SK40-MC25-90L	7PCS	M16X2.0P	4.8	3202-126
VB-578	SK50	SK50-MC42-110L	8PCS	M24X3.0P	12	3202-127



C-20,25,32,42 Collet

C-TYPE COLLET



VERTEX

20, 25, 32, 42 STRAIGHT COLLET

METRIC

ORDER NO.	COLLET	COLLETS SIZE d INSIDE DIAMETER	D1 O.D.	D2	L	PCS/SET	CODE NO.
C-20-6P	C-20	4, 6, 8, 10, 12, 16	20	25	52	6	3202-180
C-25-7P	C-25	4, 6, 8, 10, 12, 16, 20	25	31	60	7	3202-181
C-32-7P	C-32	6, 8, 10, 12, 16, 20, 25	32	37	73	7	3202-182
C-42-8P	C-42	6, 8, 10, 12, 16, 20, 25, 32	42	48	80	8	3202-183

20, 25, 32, 42 STRAIGHT COLLET

INCH

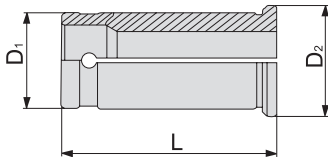
ORDER NO.	COLLET	COLLETS SIZE d INSIDE DIAMETER	D1 O.D.	D2	L	PCS/SET	CODE NO.
C-20-6I	C-20	1/4", 5/16", 3/8", 1/2", 5/8", 3/16"	20	25	52	6	3202-184
C-25-7I	C-25	1/4", 5/16", 3/8", 1/2", 5/8", 3/16", 3/4"	25	31	60	7	3202-185
C-32-7I	C-32	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"	32	37	73	7	3202-186
C-42-8I	C-42	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1", 1 1/4"	42	48	80	8	3202-187

METRIC

ORDER NO.	d	CODE NO.
C-20-4	4	3202-200
C-20-6	6	3202-201
C-20-8	8	3202-202
C-20-10	10	3202-203
C-20-12	12	3202-204
C-20-16	16	3202-205
C-25-4	4	3202-229
C-25-6	6	3202-230
C-25-8	8	3202-231
C-25-10	10	3202-232
C-25-12	12	3202-233
C-25-16	16	3202-234
C-25-20	20	3202-235
C-32-6	6	3202-250
C-32-8	8	3202-251
C-32-10	10	3202-252
C-32-12	12	3202-253
C-32-16	16	3202-254
C-32-20	20	3202-255
C-32-25	25	3202-256
C-42-6	6	3202-280
C-42-8	8	3202-281
C-42-10	10	3202-282
C-42-12	12	3202-283
C-42-16	16	3202-284
C-42-20	20	3202-285
C-42-25	25	3202-286
C-42-32	32	3202-287

INCH

ORDER NO.	d	CODE NO.
C-20-3/16"	3/16"	3202-210
C-20-1/4"	1/4"	3202-211
C-20-5/16"	5/16"	3202-212
C-20-3/8"	3/8"	3202-213
C-20-1/2"	1/2"	3202-214
C-20-5/8"	5/8"	3202-215
C-25-3/16"	3/16"	3202-240
C-25-1/4"	1/4"	3202-241
C-25-5/16"	5/16"	3202-242
C-25-3/8"	3/8"	3202-243
C-25-1/2"	1/2"	3202-244
C-25-5/8"	5/8"	3202-245
C-25-3/4"	3/4"	3202-246
C-32-3/16"	3/16"	3202-260
C-32-1/4"	1/4"	3202-261
C-32-5/16"	5/16"	3202-262
C-32-3/8"	3/8"	3202-263
C-32-1/2"	1/2"	3202-264
C-32-5/8"	5/8"	3202-265
C-32-3/4"	3/4"	3202-266
C-32-7/8"	7/8"	3202-267
C-32-1"	1"	3202-268
C-42-1/4"	1/4"	3202-290
C-42-5/16"	5/16"	3202-291
C-42-3/8"	3/8"	3202-292
C-42-1/2"	1/2"	3202-293
C-42-5/8"	5/8"	3202-294
C-42-3/4"	3/4"	3202-295
C-42-7/8"	7/8"	3202-296
C-42-1"	1"	3202-297
C-42-1 1/4"	1 1/4"	3202-298



ORDER NO.	WEIGHT
C-20	0.1
C-25	0.18
C-32	0.22
C-42	0.35



C-20,25,32,42 Wrenchs



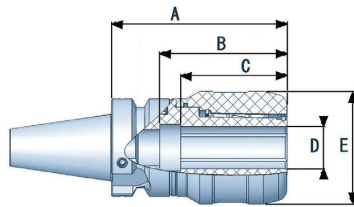
ORDER NO.	L	D	WEIGHT KGS	COLLETS	CODE NO.
C-20W	227	52	0.22	C-20	3202-311
C-25W	227	58	0.22	C-25	3202-312
C-32W	260	75	0.33	C-32	3202-313
C-42W	270	87	0.35	C42	3202-314



Double Face Contact Multi Lock Milling Chuck



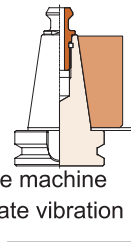
VERTEX®



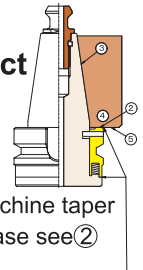
- High speed, rigid & precision.
- Improve immediately 100% of cutting efficiency and accuracy.
- A design and the performance were reformed completely.
- **Perfectly waterproof:** Contact places can be cleaned with air blow.
- **Fitting:** Longer cutter life with improved high rigidity. Less trouble due to over fitting.
- 15000 R.P.M.

FIG. 1
Before

FIG. 2
New type 2 face contact



Now commonly shank used on the machine has 2-3 mm space which can create vibration and result in rough surface.



④ after locking, shank and machine taper are totally 2 face contact, please see ② flange, ③ taper, ⑤ machine.

Compression spring

Cutting tools life is made to last long
Improvement of surface accuracy
Improvement of cutting condition

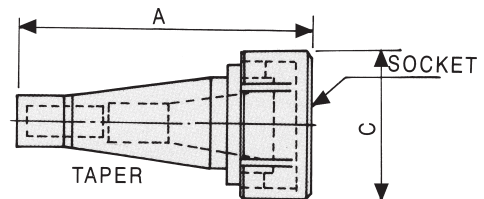
- There is an effect of attenuating the vibration.

ORDER NO	A	B	C	D	E	WEIGHT (kgs)	CODE NO.
BT40-MCD32-105B	105	100	70	32	68	2.5	3202-411
BT50-MCD32-105B	120	100	70	32	68	5.3	3202-412
BT50-MCD42-115B	135	110	80	42	83	6.5	3202-413



Quick-Change Tooling System

MILLING-QUICK CHANGE HOLDER



- QUICK-CHANG CHUCK TAPER ACCORDING TO DIN 2080 SPECIFICATION.
- EASY AND FAST CHANGING MILLING CHUCK(HOLDER).
- CHUCK TAPER PRECISELY MACHINED SUITABLE FOR HEAVY CUTTING.
- ALL THE HOLDER SIZE ARE SPECIAL FOR THIS QUICK-CHANGE TOOLING SYSTEM ONLY.



ORDER NO.	TAPER	SOCKET	A	C	WEIGHT KGS	CODE NO.
VD-101	NT30	NT30	144	70	1.3	3201-001
VD-102	NT40	NT30	150	70	2	3201-002
VD-103	NT40	NT40	181	89	2.4	3201-003
VD-105	NT50	NT40	175	89	3.8	3201-004
VD-106	R8	NT30	175	70	1.4	3201-005

MILLING-QUICK CHANGE SYSTEM KIT

ORDER NO.	TAPER	SOCKET	FULL SET	WEIGHT KGS	CODE NO.
VD-111	NT30	NT30	1. MILLING QUICK-CHANGE HOLDER	10	3201-006
VD-112	NT40	NT30	2. DRILL CHUCK HOLDER	10.5	3201-007
VD-113	NT40	NT40	3. MORSE TAPER HOLDER	14	3201-008
VD-115	NT50	NT40	4. FACE MILL HOLDER	16	3201-009
VD-116	R8	NT30	5. DIN6388 #25 COLLET CHUCK HOLDER	10	3201-010
			6. DIN6388 #25 15PCS COLLET		
			7. WRENCH		
			8. WOODEN BOX		

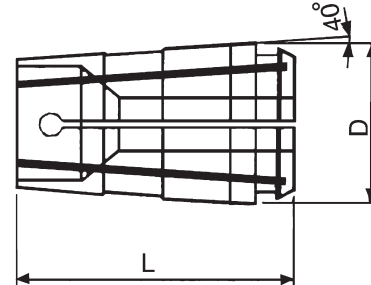


TG 100 Collet System



VERTEX®

DIN 464E



■ RANGE SIZE: 1/8" - 63/64"

TG-100 ■ D:35 ■ L:61 ■ TAPER:4 ■ WEIGHT:0.2KGS

ORDER NO.	INCH	CODE NO.
TG10-01	1/8"	3204-001
TG10-02	3/6"	3204-002
TG10-03	1/4"	3204-003
TG10-04	5/16"	3204-004
TG10-05	3/8"	3204-005
TG10-06	7/16"	3204-006
TG10-07	1/2"	3204-007
TG10-08	9/16"	3204-008
TG10-09	5/8"	3204-009
TG10-10	11/16"	3204-010
TG10-11	3/4"	3204-011
TG10-12	13/16"	3204-012
TG10-13	7/8"	3204-013
TG10-14	15/16"	3204-014
TG10-15	1"	3204-015
TG10-16	5/32"	3204-016
TG10-17	7/32"	3204-017
TG10-18	9/32"	3204-018
TG10-19	11/32"	3204-019
TG10-20	13/32"	3204-020
TG10-21	15/32"	3204-021
TG10-22	17/32"	3204-022
TG10-23	19/32"	3204-023
TG10-24	21/32"	3204-024
TG10-25	23/32"	3204-025
TG10-26	25/32"	3204-026
TG10-27	27/32"	3204-027
TG10-28	29/32"	3204-028
TG10-29	31/32"	3204-029

ORDER NO.	INCH	CODE NO.
TG10-30	9/64"	3204-030
TG10-31	11/64"	3204-031
TG10-32	13/64"	3204-032
TG10-33	15/64"	3204-033
TG10-34	17/64"	3204-034
TG10-35	19/64"	3204-035
TG10-36	21/64"	3204-036
TG10-37	23/64"	3204-037
TG10-38	25/64"	3204-038
TG10-39	27/64"	3204-039
TG10-40	29/64"	3204-040
TG10-41	31/64"	3204-041
TG10-42	33/64"	3204-042
TG10-43	35/64"	3204-043
TG10-44	37/64"	3204-044
TG10-45	39/64"	3204-045
TG10-46	41/64"	3204-046
TG10-47	43/64"	3204-047
TG10-48	45/64"	3204-048
TG10-49	47/64"	3204-049
TG10-50	49/64"	3204-050
TG10-51	51/64"	3204-051
TG10-52	53/64"	3204-052
TG10-53	55/64"	3204-053
TG10-54	57/64"	3204-054
TG10-55	59/64"	3204-055
TG10-56	61/64"	3204-056
TG10-57	63/64"	3204-057

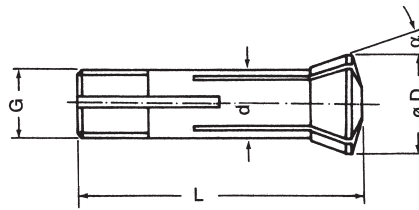


5C Collet System

5C RANGE



5C Collet



■ L:87 ■ D:37.5 ■ d:31.75 ■ Accuracy: ±0.02mm
 ■ α:10° ■ WEIGHT:0.21KGS ■ Hardness: HRC47°

ORDER NO.	Q'TY	RANGE SIZE
5C-□	1 PC	Ø 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25MM
5C-□	1 PC	Ø 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"

COMPLETE SET AVAILABLE SIZE

ORDER NO.	Q'TY	RANGE SIZE	PACKING	WEIGHT KGS	CODE NO.
VE-102	7PCS	6, 8, 10, 12, 16, 20, 25	CARTON	1.5	3205-100
VE-102I	7PCS	1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"	CARTON	1.5	3205-101



EMERGENCY TYPE SOFT COLLET

ORDER NO.	MATERIAL	kgs	CODE NO.
VE-5CS	STEEL		3205-201
VE-5CB	BRASS	0.35	3205-202
VE-5CN	NYLON		3205-203



mm

ORDER NO.	d	CODE NO.
5C-3	3	3205-001
5C-4	4	3205-002
5C-5	5	3205-003
5C-6	6	3205-004
5C-7	7	3205-005
5C-8	8	3205-006
5C-9	9	3205-007
5C-10	10	3205-008
5C-11	11	3205-009
5C-12	12	3205-010
5C-13	13	3205-011
5C-14	14	3205-012
5C-15	15	3205-013
5C-16	16	3205-014
5C-17	17	3205-015
5C-18	18	3205-016
5C-19	19	3205-017
5C-20	20	3205-018
5C-21	21	3205-019
5C-22	22	3205-020
5C-23	23	3205-021
5C-24	24	3205-022
5C-25	25	3205-023

inch

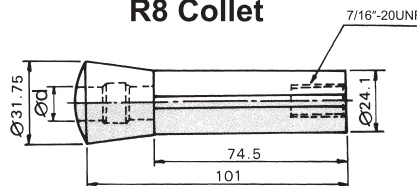
ORDER NO.	d	CODE NO.
5C-1/8	1/8"	3205-024
5C-3/16	3/16"	3205-025
5C-1/4	1/4"	3205-026
5C-5/16	5/16"	3205-027
5C-3/8	3/8"	3205-028
5C-7/16	7/16"	3205-029
5C-1/2	1/2"	3205-030
5C-9/16	9/16"	3205-031
5C-5/8	5/8"	3205-032
5C-11/16	11/16"	3205-033
5C-3/4	3/4"	3205-034
5C-13/16	13/16"	3205-035
5C-7/8	7/8"	3205-036
5C-15/16	15/16"	3205-037
5C-1	1"	3205-038



R8 Collet System



R8 Collet



■ L:105 ■ D:31.75 ■ d:24.1 ■ Accuracy: ±0.02mm
 ■ G:7/16"-20UNF ■ α:8°30' ■ WEIGHT:0.21KGS ■ Hardness: HRC47°

ORDER NO.	Q'TY	RANGE SIZE
R8-□	1 PC	Ø 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 MM
R8-□	1 PC	Ø 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

COMPLETE SET AVAILABLE SIZE

ORDER NO.	Q'TY	RANGE SIZE	WEIGHT KGS	CODE NO.
VE-110	6PCS	6, 8, 10, 12, 16, 20 MM	1.5	3206-100
VE-114	7PCS	6, 8, 10, 12, 14, 16, 20 MM	1.5	3206-101

EMERGENCY TYPE SOFT COLLET

ORDER NO.	Q'TY	RANGE SIZE	WEIGHT KGS	CODE NO.
VE-109I	5PCS	1/4", 3/8", 1/2", 5/8", 3/4"	1.1	3206-102
VE-110I	6PCS	1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	1.5	3206-103
VE-114I	7PCS	3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	1.5	3206-104

mm

ORDER NO.	d	CODE NO.
R8-3	3	3206-001
R8-4	4	3206-002
R8-5	5	3206-003
R8-6	6	3206-004
R8-7	7	3206-005
R8-8	8	3206-006
R8-9	9	3206-007
R8-10	10	3206-008
R8-11	11	3206-009
R8-12	12	3206-010
R8-13	13	3206-011
R8-14	14	3206-012
R8-15	15	3206-013
R8-16	16	3206-014
R8-17	17	3206-015
R8-18	18	3206-016
R8-19	19	3206-017
R8-20	20	3206-018

inch

ORDER NO.	d	CODE NO.
R8-1/8	1/8"	3206-019
R8-3/16	3/16"	3206-020
R8-1/4	1/4"	3206-021
R8-5/16	5/16"	3206-022
R8-3/8	3/8"	3206-023
R8-7/16	7/16"	3206-024
R8-1/2	1/2"	3206-025
R8-9/16	9/16"	3206-026
R8-5/8	5/8"	3206-027
R8-11/16	11/16"	3206-028
R8-3/4	3/4"	3206-029



U2 Collet System

NO.1 U2 COLLET RANGE SIZE 3~16mm

NO.2 U2 COLLET RANGE SIZE 18~25mm



VERTEX

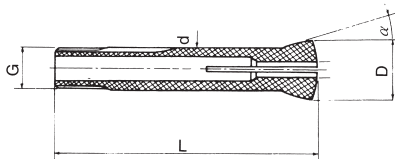
NO.1



■ L:120 ■ D:28 ■ d:20 ■ G:2.0P ■ Accuracy: ±0.02mm
■ α:17°30' ■ WEIGHT:0.18KGS ■ Hardness: HRC47°

ORDER NO.	Q'TY	RANGE SIZE
VE-U2-□	1 PC	NO.1 Ø 1.5, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 NO.2 Ø 18, 20, 25MM
VE-U2-□	1 PC	Ø 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8"

NO.2



mm			mm			inch		
ORDER NO.	d	CODE NO.	ORDER NO.	d	CODE NO.	ORDER NO.	d	CODE NO.
VE-U2-1.5	1.5	3207-026	VE-U2-10	10	3207-008	VE-U2-1/8	1/8"	3207-018
VE-U2-2	2	3207-027	VE-U2-11	11	3207-009	VE-U2-3/16	3/16"	3207-019
VE-U2-3	3	3207-001	VE-U2-12	12	3207-010	VE-U2-1/4	1/4"	3207-020
VE-U2-4	4	3207-002	VE-U2-13	13	3207-011	VE-U2-5/16	5/16"	3207-021
VE-U2-5	5	3207-003	VE-U2-14	14	3207-012	VE-U2-3/8	3/8"	3207-022
VE-U2-6	6	3207-004	VE-U2-15	15	3207-013	VE-U2-1/2	1/2"	3207-023
VE-U2-7	7	3207-005	VE-U2-16	16	3207-014	VE-U2-5/8	5/8"	3207-024
VE-U2-8	8	3207-006	VE-U2-18	18	3207-015			
VE-U2-9	9	3207-007	VE-U2-20	20	3207-016			
			VE-U2-25	25	3207-017			

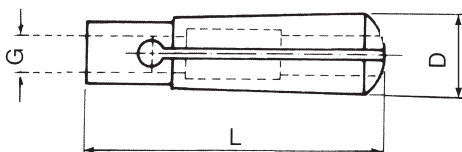


MT3 Collet System

■ D:24.1 ■ L:87 ■ WEIGHT:0.18KGS
■ DRAW BAR SIZE: G1.M12X1.75P
G2.M10X1.5P
G3.1/2"-12
G4.3/8"-16



ORDER NO.	Q'TY	RANGE SIZE	DRAW BAR SIZE
MT3-□	1 PC	Ø 4, 6, 8, 10, 12, 16, 20MM	G1,G2
MT3-□	1 PC	Ø 1/8", 1/4", 3/8", 1/2", 5/8", 3/4"	G3,G4



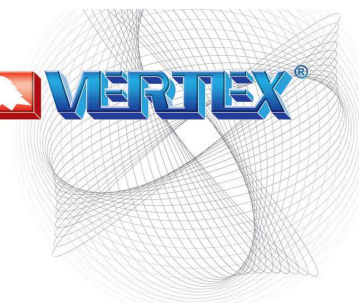
mm			inch		
ORDER NO.	d	CODE NO.	ORDER NO.	d	CODE NO.
MT3-4	4	3208-100	MT3-1/8	1/8"	3208-107
MT3-6	6	3208-101	MT3-1/4	1/4"	3208-108
MT3-8	8	3208-102	MT3-3/8	3/8"	3208-109
MT3-10	10	3208-103	MT3-1/2	1/2"	3208-110
MT3-12	12	3208-104	MT3-5/8	5/8"	3208-111
MT3-16	16	3208-105	MT3-3/4	3/4"	3208-112
MT3-20	20	3208-106			



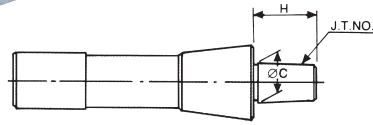
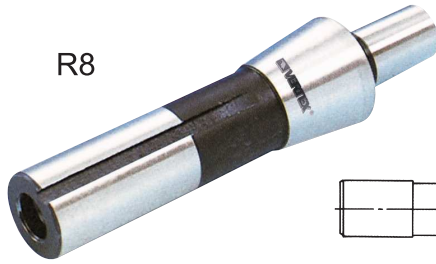
Drill Chucks Arbor



VERTEX

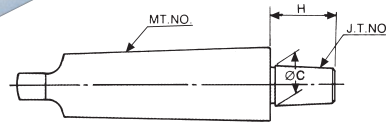


R8



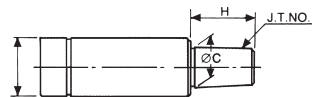
ORDER NO.	TAPER	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-121	R8	JT1	9.754	18	0.5	3209-001
VJ-122		JT2	13.94	20	0.5	3209-002
VJ-123		JT6	17.17	26	0.5	3209-003
VJ-124		B16	15.733	24	0.5	3209-004

MT3.4.5



ORDER NO.	TAPER	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-131	MT3	JT6	17.17	26	0.4	3209-030
VJ-132	MT4	JT6	17.17	26	0.7	3209-031
VJ-133	MT5	JT6	17.17	26	1.6	3209-032
VJ-134	MT3	B16	15.733	24	0.3	3209-033

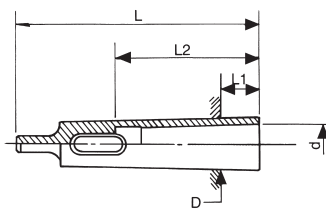
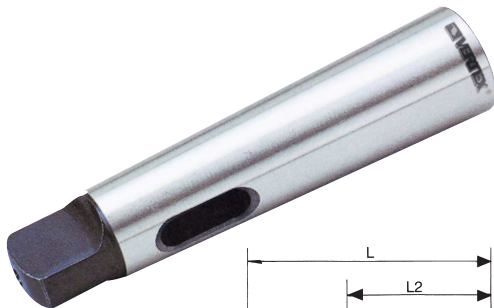
C20.25.32



ORDER NO.	TAPER	JT NO.	C	H	WEIGHT (kg)	CODE NO.
VJ-141	C20	JT6	17.17	26	0.2	3209-060
VJ-142	C25	JT6	17.17	26	0.3	3209-061
VJ-143	C32	JT6	17.17	26	0.5	3209-062



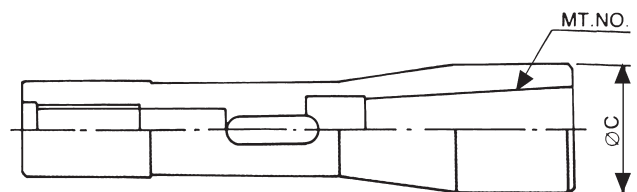
Morse Taper Sleeve



ORDER NO.	I.D.xO.D.	D	d	L	I1	I2	WEIGHT (kg)	CODE NO.
VQ-101	MT2xMT3	23.825	17.780	112	18	67	0.2	3210-001
VQ-102	MT2xMT4	31.267	17.780	124	6.5	67	0.5	3210-002
VQ-103	MT2xMT5	44.399	17.780	156	6.5	67	1.4	3210-003
VQ-105	MT3xMT4	31.267	23.825	140	22.5	84	0.4	3210-005
VQ-106	MT3xMT5	44.399	23.825	156	6.5	84	1.3	3210-006
VQ-107	MT3xMT6	63.348	23.825	218	8	84	4	3210-007
VQ-108	MT4xMT5	44.399	31.267	171	21.5	107	1	3210-008
VQ-109	MT4xMT6	63.348	31.267	218	8	107	3.7	3210-009
VQ-110	MT5xMT6	63.348	44.399	218	8	133	2.9	3210-010



R8 With Morse Taper Sleeve



ORDER NO.	SHANK	SIZE	MT NO.	WEIGHT (kg)	CODE NO.
VQ-122	R8	R8-MT2	MT2	0.4	3211-001
VQ-123	R8	R8-MT3	MT3	0.5	3211-002



Face Mill Arbor

NT30, 40, 50, R8, MT3, 4

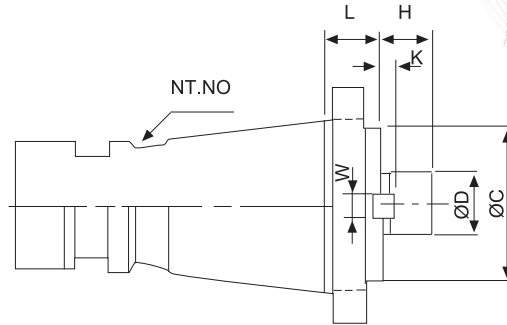
DIN 2080/ISO SHANK



NT40 WITH
MAHO GAP



NT30



MATERIAL:SCM-21 HARDNESS:HRC 50°-55°

Squareness of mounting surface:Less than 0.0002"(0.005M/M)

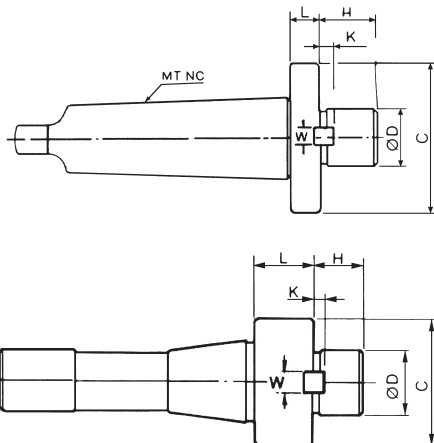
Deflection in shaft and taper:Less than 0.0002"(0.005M/M)

INCH FMA TYPE

ORDER NO.	TAPER	SHAFT SIZE				MOUNTING SIZE		WEIGHT (kg)	CODE NO.
		D	H	W	K	C	L		
VF-101	NT30	25.4	20	9.57	5	65	20	0.7	3212-001
VF-102	NT30	31.75	23	12.75	7	73	20	1	3212-002
VF-103	NT30	38.1	22	15.90	9	82	20	1.1	3212-003
VF-104	NT40	25.4	20	9.57	5	65	20	1.2	3212-004
VF-105	NT40	31.75	22	12.75	7	73	20	1.5	3212-005
VF-106	NT40	38.1	23	15.90	9	82	20	1.8	3212-006
VF-109	NT50	25.4	20	9.57	5	65	20	3.2	3212-009
VF-110	NT50	31.75	22	12.75	7	73	20	3.3	3212-010
VF-111	NT50	38.1	23	15.90	9	82	20	3.6	3212-011
VF-112	NT50	50.8	24	19.05	10	95	20	4	3212-012
VF-114	R8	25.4	20	9.57	5	40	20	0.9	3212-014
VF-115	R8	31.75	22	12.75	7	53	20	1.2	3212-015
VF-116	MT-3	25.4	20	9.57	5	40	20	0.7	3212-016
VF-117	MT-4	25.4	20	9.57	5	40	20	1	3212-017

METRIC FMB TYPE

ORDER NO.	TAPER	SHAFT SIZE				MOUNTING SIZE		WEIGHT (kg)	CODE NO.
		D	H	W	K	C	L		
VF-120	NT30	22	18	9.57	5	40	20	0.7	3212-100
VF-121	NT30	27	20	12.75	7	53	20	0.8	3212-101
VF-122	NT30	32	23	15.90	7	63	20	1.1	3212-102
VF-123	NT40	22	18	9.57	5	40	20	1.2	3212-103
VF-124	NT40	27	20	12.75	7	53	20	1.3	3212-104
VF-125	NT40	32	23	15.90	7	63	20	1.4	3212-105
VF-126	NT40	40	26	19.05	8	85	20	1.9	3212-106
VF-127	NT40	60	32	25.40	5	128	24	4	3212-107
VF-128	NT50	22	18	9.57	5	40	20	3.1	3212-108
VF-129	NT50	27	20	12.75	7	53	20	3.3	3212-109
VF-130	NT50	32	23	15.90	7	63	20	3.5	3212-110
VF-131	NT50	40	26	19.05	8	85	20	3.7	3212-111
VF-132	NT50	60	32	25.40	5	128.57	24	5.4	3212-112
VF-134	R8	22	18	9.57	5	40	20	0.9	3212-113
VF-135	R8	27	20	12.75	7	53	20	1	3212-114
VF-136	MT-3	27	20	9.57	7	53	20	0.7	3212-115
VF-137	MT4	27	20	9.57	7	53	20	1.1	3212-116





Morse Taper Adapter

NT-30, 40, 50, R8, MT3, 4

DIN 2080/ISO SHANK



VERTEX

MORSE TAPER ADAPTER WITH STRAIGHT SHANK

STANDARD TYPE

ORDER NO.	TAPER	TYPE	C	L	WEIGHT (kgs)	CODE NO.
VI-101	NT30	MT1	25	25	0.6	3211-030
VI-102	NT30	MT2	32	50	0.6	3211-031
VI-103	NT30	MT3	35	65	0.7	3211-032
VI-104	NT40	MT1	25	30	0.9	3211-033
VI-105	NT40	MT2	32	30	1	3211-034
VI-106	NT40	MT3	40	70	1.2	3211-035
VI-107	NT40	MT4	50	90	1.5	3211-036
VI-108	NT50	MT2	32	30	2.8	3211-037
VI-109	NT50	MT3	40	30	2.7	3211-038
VI-110	NT50	MT4	50	45	3.2	3211-039
VI-111	NT50	MT5	65	105	3.7	3211-040

PLEASE NOTIFY THE DRAW BAR THREAD SIZE WHEN ORDERING.

STANDARD TYPE

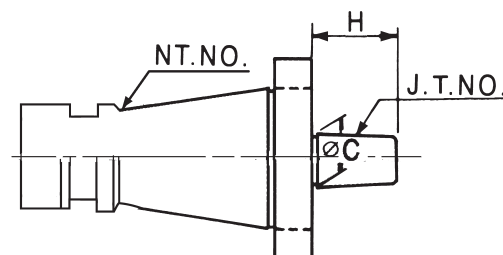
ORDER NO.	TAPER	SIZE	D	MT NO	C	L	WEIGHT (kg)	CODE NO.
VI-131	C20	C20-MT1	20	MT1	27	60	0.2	3211-060
VI-132	C20	C20-MT2	20	MT2	27	70	0.2	3211-061
VI-133	C25	C25-MT1	25	MT1	33	60	0.3	3211-062
VI-134	C25	C25-MT2	25	MT2	33	70	0.2	3211-063
VI-135	C25	C25-MT3	25	MT3	33	90	0.2	3211-064
VI-136	C32	C32-MT1	32	MT1	37	60	0.4	3211-065
VI-137	C32	C32-MT2	32	MT2	37	70	0.4	3211-066
VI-138	C32	C32-MT3	32	MT3	37	90	0.4	3211-067



Jacobs Taper Drill Chuck Arbor

NT30, 40, 50-JT & B

DIN 2080/ISO SHANK



ORDER NO.	TAPER	JT NO	C	H	WEIGHT (kgs)	CODE NO.
VJ-103	NT30	JT6	17.17	26	0.6	3209-092
VJ-106	NT40	JT6	17.17	26	1	3209-095
VJ-109	NT50	JT6	17.17	26	3.2	3209-098

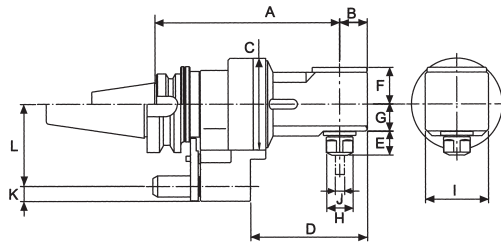
PLEASE NOTIFY THE DRAW BAR THREAD SIZE WHEN ORDERING.



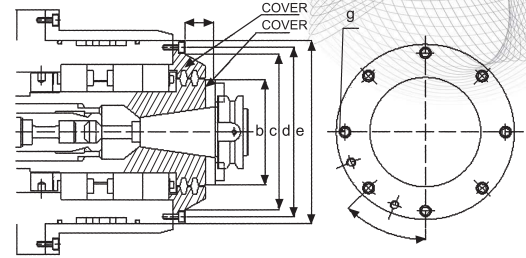
Right Angle Heads For Machining Center



VERTEX



Please provide spindle dimension
in metric for mounting



a: _____ mm
b: _____ mm
c: _____ mm
d: _____ mm
P.C.D For g

e: _____ mm
f: _____ mm
g: _____ mm
thread ØD x pitch
x holes number

- Compact body design is the best tool for internal processing.
- 6000 rpm high speed processing. Increases machining efficiency.
- Allow automatic tool changed. Increases productivity.

Concentricity:	0.002mm
Squareness:	10 Arc Second
Material:	FCD60~FCD65
R.P.M.:	Max. 6000RPM
Gear Ration:	1:1
Spindle Type:	BT
Standard Accessory:	27mm Wrench, ER Wrench, ER Nut

ORDER NO.	A	B	C	D	E	F	G	H	I	J	K	L	N.W.(KGS)	CODE NO.
VHA-BT40-ER20	192	29	95	122	28.5	38	28	28	66	1~13(ER20)	15.5	65	6.2	3500-020
VHA-BT50-ER20	203	29	95	122	28.5	38	28	28	66	1~13(ER20)	15.5	80/85	9.5	3500-021

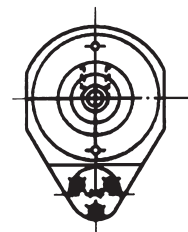
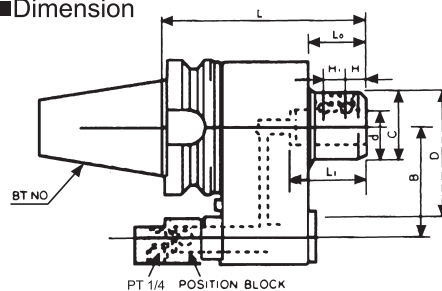


Oil-Feed Holder / Slo

Coolant hole holder for straight shank
BT40,BT50



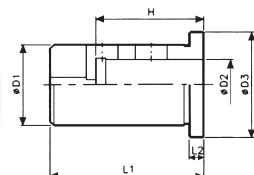
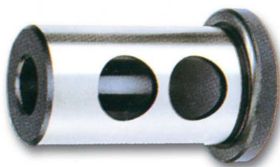
■Dimension



Unit:mm

ORDER NO.	d	L	B	C	D	L0	L1	H	H1	WEIGHT(kgs)	CODE NO.
BT40SLO32-150	32	150	65	53	90	52	60	15	15	4KGS	3214-001
BT40SLO40-150	40	150	65	70	90	52	70	19	18	4.6KGS	3214-002
BT50SLO32-150	32	150	80	54	100	42	60	15	15	7.1KGS	3214-003
BT50SLO40-150	40	150	80	64	100	52	70	19	18	7.8KGS	3214-004

Reducing sleeve for oil feed holder.



ORDER NO.	D1	D2	D3	L1	L2	H	WEIGHT(kg)	CODE NO.
OC32-20	32	20	42	63	6	48	0.4	3214-103
OC32-25	32	25	42	63	6	54	0.3	3214-104
OC40-25	40	25	50	63	6	54	0.6	3214-105
OC40-32	40	32	50	63	6	58	0.5	3214-106



Face Mill Arbor

BT30,40,50



VERTEX®

BT-SHANK MAS 403

FIG. 1

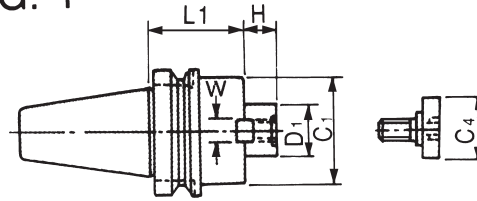
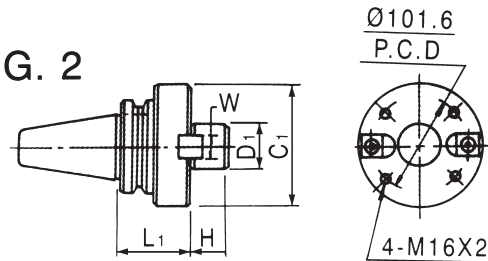


FIG. 2



INCH FMA TYPE

ORDER NO.	TAPER	FIG	D1	L1	H	C1	W	C4	N.W. (KG)	CODE NO.
BT-101	BT30	1	25.4	50	22	45	9.5	33	1.0	3212-201
BT-103	BT40	1	25.4	45	22	60	9.5	33	1.6	3212-203
BT-105	BT40	1	25.4	90	22	60	9.5	33	1.6	3212-205
BT-106	BT40	1	31.75	45	30	70	12.7	40	1.8	3212-206
BT-108	BT40	1	31.75	90	30	70	12.7	40	2.8	3212-208
BT-109	BT40	1	38.1	60	34	85	15.9	50	2.5	3212-209
BT-111	BT50	1	25.4	45	22	60	9.5	33	4.2	3212-211
BT-112	BT50	1	25.4	105	22	60	9.5	33	4.9	3212-212
BT-113	BT50	1	25.4	150	22	60	9.5	33	6.2	3212-213
BT-114	BT50	1	31.75	45	30	70	12.7	40	4.0	3212-214
BT-115	BT50	1	31.75	75	30	70	12.7	40	4.8	3212-215
BT-116	BT50	1	31.75	105	30	70	12.7	40	5.6	3212-216
BT-117	BT50	1	38.1	45	34	85	15.9	50	4.6	3212-217
BT-118	BT50	1	38.1	75	34	85	15.9	50	5.6	3212-218
BT-119	BT50	1	50.8	45	36	95	19.05	65	4.8	3212-219
BT-121	BT50	1	47.625	75	38	128.57	25.4	-	7.9	3212-221

METRIC FMB TYPE

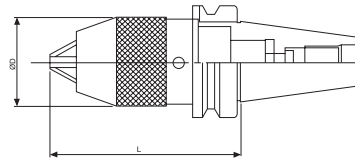
ORDER NO.	TAPER	FIG	D1	L1	H	C1	W	C4	N.W. (KG)	CODE NO.
BT-150	BT30	1	22	45	18	48	10	33	2.0	3212-267
BT-151	BT30	1	27	45	20	60	12	33	2.2	3212-268
BT-152	BT40	1	22	45	18	48	10	50	1.5	3212-269
BT-153	BT40	1	22	90	18	48	10	33	2.2	3212-270
BT-154	BT40	1	27	45	20	60	12	33	1.7	3212-271
BT-155	BT40	1	27	90	20	60	12	33	2.7	3212-272
BT-156	BT40	1	32	45	22	62	14	50	1.8	3212-273
BT-157	BT40	1	40	60	26	85	16	50	2.7	3212-274
BT-158	BT50	1	22	45	18	60	10	33	4.2	3212-275
BT-159	BT50	1	22	75	18	60	10	33	4.6	3212-276
BT-160	BT50	1	27	45	20	70	12	33	4.3	3212-277
BT-161	BT50	1	27	75	20	60	12	33	4.9	3212-278
BT-162	BT50	1	27	105	20	60	12	33	5.7	3212-279
BT-163	BT50	1	32	75	22	75	14	50	5.5	3212-280
BT-164	BT50	1	32	105	22	80	14	33	6.5	3212-281
BT-165	BT50	1	32	150	22	80	14	33	8.7	3212-282
BT-166	BT50	1	40	75	26	85	16	50	6	3212-283



Drill Chuck Holder/APU



VERTEX



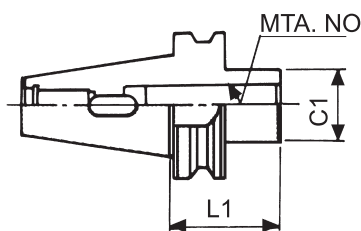
ORDER NO.	TAPER	ØD	KGS	CODE NO.
BT-180	BT30-APU08	37	1	3212-301
BT-181	BT30-APU13	50	1.4	3212-302
BT-182	BT40-APU08	37	1.5	3212-303
BT-183	BT40-APU13	50	2	3212-304
BT-184	BT40-APU16	58	2.5	3212-305
BT-186	BT50-APU13	50	4.7	3212-307
BT-188	BT50-APU16	58	4.8	3212-309



Morse Taper Adaptor

BT30,40,50-MTA,MTB

MAS 403 BT-SHANK



MTA TYPE (STANDARD TYPE)

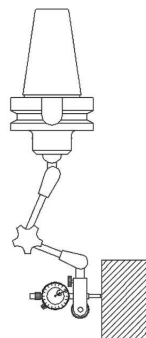
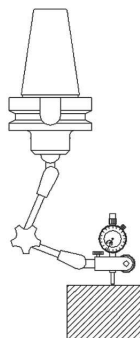
ORDER NO.	TAPER	MT.NO.	L1	C1	WEIGHT(KG)	CODE NO.
BT-204	BT30	MT-2	60	32	0.6	3211-091
BT-207	BT30	MT-3	80	40	1.2	3211-092
BT-209	BT40	MT-1	50	25	1.1	3211-094
BT-212	BT40	MT-2	50	32	1.1	3211-095
BT-215	BT40	MT-3	75	40	1.3	3211-096
BT-218	BT40	MT-4	95	50	1.5	3211-097
BT-220	BT50	MT-1	45	25	3.5	3211-098
BT-223	BT50	MT-2	50	32	3.5	3211-099
BT-226	BT50	MT-3	65	40	3.6	3211-100
BT-229	BT50	MT-4	75	50	3.6	3211-101
BT-231	BT50	MT-5	105	65	4.2	3211-102



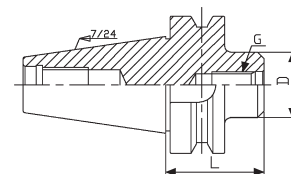
Lever Checking Holders



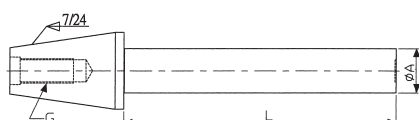
M8 THREAD
FOR CHECKING ARM



ORDER NO.	L	ØD	G	kgs	CODE NO.
BT40-M8	47	30	M8	1.3	3029-160
BT50-M8	58	30	M8		3029-161



Test Arbor



ORDER NO.	TAPER	G CAN FOR PULL STUD	A	L	KGS	CODE NO.
A50	BT-50	M24xP3.0	40	250	5.3	3405-412
A40	BT-40	M16xP2.0	40		3.9	3405-413
A30	BT-30	M12xP1.75	30		2.4	3405-414



Sidelock End Mill Holder

BT 30, 40, 50-SLA

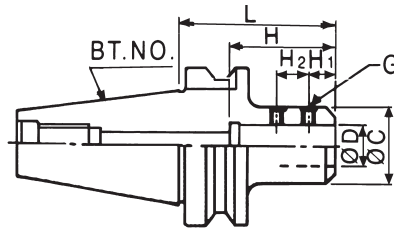
MAS 403



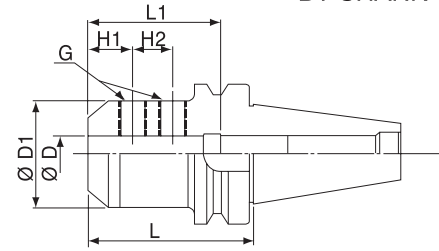
VERTEX



WELDON TYPE



BT-SHANK



Unit:mm

ORDER NO.	SIZE	ØD	ØD1	L	L1	H1	H2	G	WEIGHT (kg)	CODE NO.
BT-436	BT30-SLA6-60	6	25	60	30	12	10	M6x1.0	0.7	3213-126
BT-437	BT30-SLA8-60	8	28	60	35	14	12	M8x1.25	0.7	3213-127
BT-438	BT30-SLA10-60	10	35	60	40	15	14	M8x1.25	0.7	3213-128
BT-439	BT30-SLA12-60	12	42	60	50	20	16	M12x1.5	0.8	3213-129
BT-440	BT30-SLA16-75	16	48	75	60	20	18	M12x1.5	0.9	3213-130
BT-441	BT30-SLA20-75	20	52	75	70	23	19	M12x1.5	1.2	3213-131
BT-442	BT40-SLA6-75	6	25	75	30	12	10	M6x1.0	1.2	3213-132
BT-443	BT40-SLA8-75	8	28	75	35	14	12	M8x1.25	1.3	3213-133
BT-444	BT40-SLA10-75	10	35	75	40	15	14	M8x1.25	1.4	3213-134
BT-445	BT40-SLA12-75	12	42	75	50	20	16	M12x1.5	1.5	3213-135
BT-446	BT40-SLA14-75	14	44	75	50	20	16	M12x1.5	1.5	3213-136
BT-447	BT40-SLA16-75	16	48	75	60	20	18	M12x1.5	1.6	3213-137
BT-448	BT40-SLA18-75	18	50	75	60	20	18	M12x1.5	1.6	3213-138
BT-449	BT40-SLA20-90	20	52	90	70	23	19	M12x1.5	1.9	3213-139
BT-450	BT40-SLA25-90	25	62	90	80	24	25	M18x1.5	2.2	3213-140
BT-451	BT40-SLA32-90	32	63	90	80	24	28	M20x1.5	2	3213-141
BT-452	BT40-SLA40-105	40	79	105	80	24	28	M20x1.5	3.2	3213-142
BT-453	BT40-SLA42-105	42	79	105	80	24	28	M20x1.5	3.1	3213-143
BT-454	BT50-SLA6-90	6	25	90	30	12	10	M6x1.0	3.9	3213-144
BT-455	BT50-SLA6-150	6	25	150	30	12	10	M6x1.0	4	3213-145
BT-456	BT50-SLA8-90	8	28	90	35	14	12	M8x1.25	3.7	3213-146
BT-457	BT50-SLA8-150	8	28	150	35	14	12	M8x1.25	4.2	3213-147
BT-458	BT50-SLA10-90	10	35	90	40	15	14	M8x1.25	4.2	3213-148
BT-459	BT50-SLA10-150	10	35	150	40	15	14	M8x1.25	4.3	3213-149
BT-460	BT50-SLA12-90	12	42	90	50	20	16	M12x1.5	4.2	3213-150
BT-461	BT50-SLA12-150	12	42	150	50	20	16	M12x1.5	4.9	3213-151
BT-462	BT50-SLA14-90	14	44	90	55	20	16	M12x1.5	4.2	3213-152
BT-463	BT50-SLA16-90	16	48	90	60	20	18	M12x1.5	4.3	3213-153
BT-464	BT50-SLA16-150	16	48	150	60	20	18	M12x1.5	5	3213-154
BT-465	BT50-SLA18-90	18	50	90	60	20	18	M12x1.5	4.3	3213-155
BT-467	BT50-SLA20-150	20	52	150	70	23	19	M12x1.5	4.5	3213-157
BT-468	BT50-SLA20-200	20	52	200	70	23	19	M12x1.5	6.4	3213-158
BT-470	BT50-SLA25-105	25	65	105	80	24	25	M18x1.5	5	3213-160
BT-474	BT50-SLA32-105	32	72	105	80	24	28	M20x1.5	5.3	3213-164
BT-477	BT50-SLA32-250	32	72	250	80	24	28	M20x1.5	9.8	3213-167
BT-478	BT50-SLA40-120	40	90	120	90	30	32	M20x1.5	6.5	3213-168
BT-479	BT50-SLA42-120	42	90	120	90	30	32	M20x1.5	6.7	3213-169



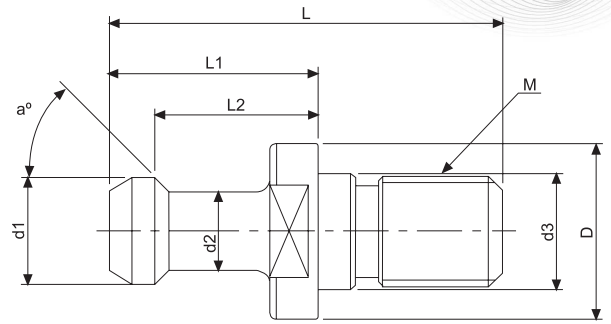
Pull Studs

BT 30, 40, 50



VERTEX®

FOR MAS 403



THREAD GROUND

Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	M	CODE NO.
BT-510	BT30X90°	90	43	23	18	16.5	11	7	12.5	M12	3215-007
BT-501	BT30X45°	45	43	23	18	16.5	11	7	12.5	M12	3215-008
BT-502	BT30X60°	60	43	23	18	16.5	11	7	12.5	M12	3215-009
BT-511	BT40X90°	90	60	35	28	23	15	10	17	M16	3215-010
BT-503	BT40X45°	45	60	35	28	23	15	10	17	M16	3215-011
BT-504	BT40X60°	60	60	35	28	23	15	10	17	M16	3215-012
BT-512	BT50X90°	90	85	45	35	38	23	17	25	M24	3215-013
BT-505	BT50X45°	45	85	45	35	38	23	17	25	M24	3215-014
BT-506	BT50X60°	60	85	45	35	38	23	17	25	M24	3215-015



Pull Studs

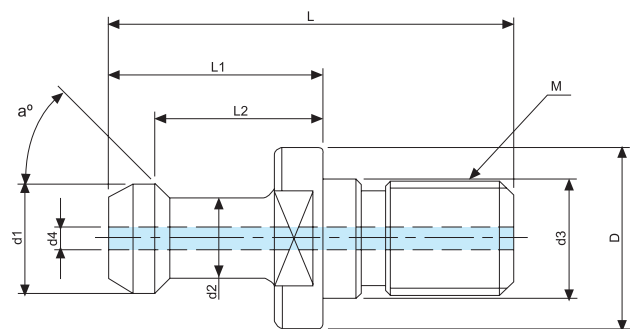
MAS 403

BT-40,50

FOR MAS 403



• With through hole for internal coolant

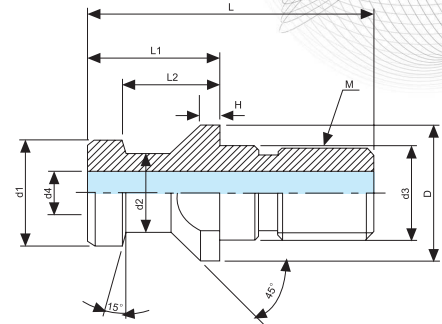
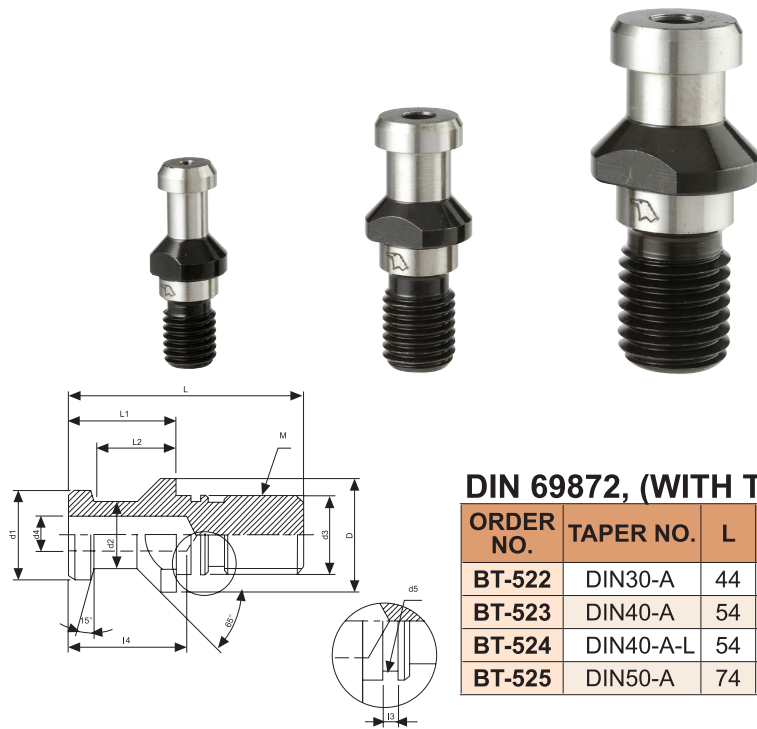


Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	d4	M	CODE NO.
BT-516	BT40X45°W	45	60	35	28	23	15	10	17	4	M16	3215-060
BT-517	BT40X60°W	60	60	35	28	23	15	10	17	4	M16	3215-061
BT-518	BT40X90°W	90	60	35	28	23	15	10	17	4	M16	3215-062
BT-519	BT50X45°W	45	85	45	35	38	23	17	25	7	M24	3215-063
BT-520	BT50X60°W	60	85	45	35	38	23	17	25	7	M24	3215-064
BT-521	BT50X90°W	90	85	45	35	38	23	17	25	7	M24	3215-065



FOR DIN 69872



DIN 69872, (WITH THROUGH HOLE)-A TYPE

Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	D	d1	d2	d3	d4	M	H	CODE NO.
BT-522	DIN30-A	44	24	19	17	13	9	13		M12		3215-066
BT-523	DIN40-A	54	26	20	23	19	14	17	7	M16	9	3215-067
BT-524	DIN40-A-L	54	29	23	23	19	14	17	7	M16		3215-068
BT-525	DIN50-A	74	34	25	36	28	21	25	11.5	M14		3215-069

WITHOUT O-RING DIN69872-B TYPE

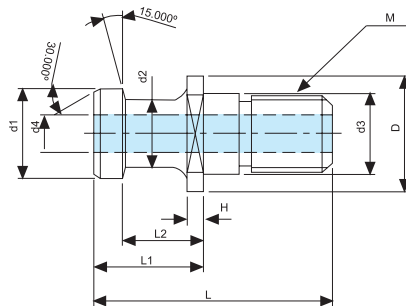
Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	I3	I4	D	d1	d2	d3	d4	M	CODE NO.
BT-526	DIN30-B	44	24	19	1.4		17	13	9	13		M12	3215-070
BT-527	DIN40-B	54	26	20	1.9	27	23	19	14	17	7	M16	3215-071
BT-528	DIN50-B	74	34	25	3	37	36	28	21	25	11.5	M24	3215-072



ISO-A TYPE

FOR ISO/JIS 7388/2/A

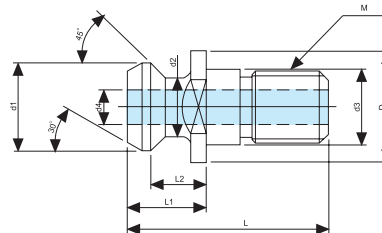


Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	D	d1	d2	d3	d4	M	H	CODE NO.
BT-529	ISO40-A	54	26	20	23	29	24	27	7	M16	6	3215-073
BT-530	ISO50-A	74	34	25	36	28	21	25	11.5	M24		3215-074

ISO-B TYPE

FOR ISO/JIS 7388/2/B



Unit:mm

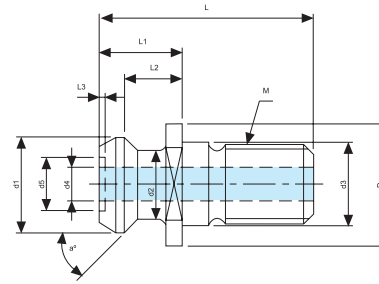
ORDER NO.	TAPER NO.	L	L1	L2	D	d1	d2	d3	d4	M	CODE NO.
BT-531	ISO40-B	44.5	16.4	11.15	22.5	18.95	12.95	17	7.35	M16	3215-075
BT-532	ISO50-B	65.5	25.5	17.95	37	29.1	19.6	25	11.55	M24	3215-076



Pull Studs



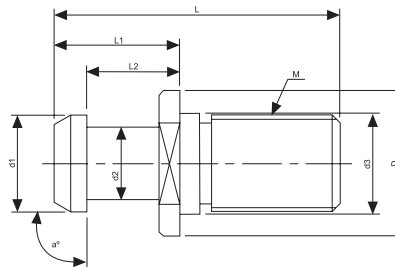
MAZAK FOR MAZAK MACHINE



Unit:mm

ORDER NO.	TAPER NO.	L	L1	L2	L3	D	d1	d2	d3	d4	d5	M	CODE NO.
BT-533	MAZAK BT50	65.2	25.2	17.58	1.8	37	28.95	20.83	25	10	16	M24	3215-077
BT-534	MAZAK BT40	44.1	19.1	14		22	18.8	12.45	17	7		M16	3215-078
BT-535	MAZAK CAT40	44.1	16.1	11		22	18.8	12.45	17	7		M16	3215-079

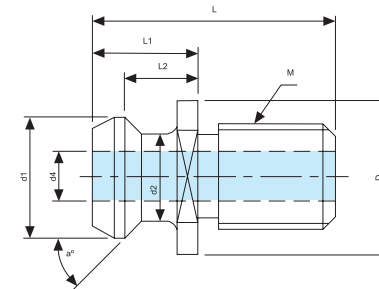
mitsui FOR MITSUI MACHINE



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	M	CODE NO.
BT-536	mitsui BT40	90	50	25	18	23	15	10	17	M16	3215-080
BT-537	mitsui BT50	90	71	31	23	36	24	18	25	M24	3215-081

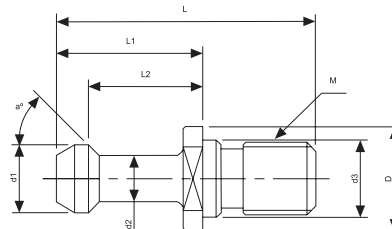
CAT FOR ANSI B5-50



Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d4	M	CODE NO.
BT-538	CAT40	45	38.1	16.2	11.2	23.8	18.8	12.4	7.1	5/8"	3215-082
BT-539	CAT50	45	58.4	25.4	17.8	36	28.9	20.8	11.8	1"	3215-083

CAT-BT FOR BT MACHINE



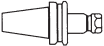







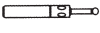
Unit:mm

ORDER NO.	TAPER NO.	a°	L	L1	L2	D	d1	d2	d3	M	CODE NO.
BT-540	CAT40X45°	45	57	32	25	23	15	10		5/8"	3215-084
BT-541	CAT40X60°	60	57	32	25	23	15	10		5/8"	3215-085
BT-542	CAT40X90°	90	57	32	25	23	15	10		5/8"	3215-086
BT-543	CAT50X45°	45	78.6	45	35.2	38	23	17		1"	3215-087
BT-544	CAT50X60°	60	78.6	45	35.2	38	23	17		1"	3215-088
BT-545	CAT50X90°	90	78.6	45	35.2	38	23	17		1"	3215-089
BT-546	CAT40X45°M	45	57	32	25	23	15	10	17	M16	3215-090
BT-547	CAT40X60°M	60	57	32	25	23	15	10	17	M16	3215-091
BT-548	CAT40X90°M	90	57	32	25	23	15	10	17	M16	3215-092

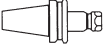









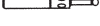
We recommend a complete set which is included tool holder, collet chuck, collet set, pull stud, tooling locking stand, edge finder for NC machining center. it is popular and suitable sale-mix in the market.



ORDER NO. VBT-30-0720 CODE NO. 3216-001 BT-30 WITH 7PCS. HOLDER & ER-20 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER20 COLLET CHUCK BT30-ER20-60		3pcs.	For small Dia. End mill and Drills
2	MORSE TAPER ADAPTOR BT30-MTA1-50		1pc.	For drills with Morse taper Shank No.1.
3	MORSE TAPER ADAPTOR BT30-MTA2-60		1pc.	For drills with Morse taper Shank No.2.
4	END MILL HOLDER BT-30-SL12-60		1pc.	For straight shank end mill with Sidelock edge Dia. 12mm(WELDON Type)
5	END MILL HOLDER BT30-SL16-60		1pc.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
6	ER20 SPRING COLLET ER20-dØ		11pcs.	For item 1. Including 11 collets as below: Ø3,4,5,6,7,8,9,10,11,12,13mm
7	PULL STUD BT-501, BT-502		7pcs.	BT-501 $\theta = 45^\circ$ BT-502 $\theta = 60^\circ$
8	TOOL HOLDER LOCKING STAND VTS-BT-30		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
9	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.

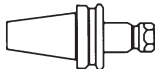
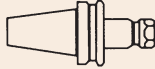
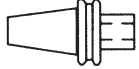











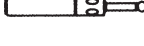
ORDER NO. VBT-30-1520 CODE NO. 3216-011 BT-30 WITH 15PCS. HOLDER & ER-20 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER20 COLLET CHUCK BT30-ER20-60		6pcs.	For small Dia. End mill and Drills
2	MORSE TAPER ADAPTOR BT30-MTA1-50		1pc.	For drills with Morse taper Shank No.1.
3	MORSE TAPER ADAPTOR BT30-MTA2-60		1pc.	For drills with Morse taper Shank No.2.
4	FACE MILL ARBOR BT30-FMB22-45		1pc.	For Holding the face milling Cutter Dia.50, 63mm
5	END MILL HOLDER BT-30-SL12-60		2pcs.	For straight shank end mill with Sidelock edge Dia. 12mm(WELDON Type)
6	END MILL HOLDER BT30-SL16-60		2pcs.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
7	END MILL HOLDER BT30-SL20-75		2pcs.	For straight shank end mill with Sidelock edge Dia. 20mm(WELDON Type)
8	ER20 SPRING COLLET ER20-dØ		11pcs.	For item 1. Including 11 collets as below: Ø3,4,5,6,7,8,9,10,11,12,13mm
9	PULL STUD BT-501, BT-502		15pcs.	BT-501 $\theta = 45^\circ$ BT-502 $\theta = 60^\circ$
10	TOOL HOLDER LOCKING STAND VTS-BT-30		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
11	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.

We recommend a complete set which is included tool holder, collet chuck, collet set, pull stud, tooling locking stand, edge finder for NC machining center. it is popular and suitable sale-mix in the market.

G.W.:39.6 kgs

ORDER NO. VBT-40-1532 CODE NO. 3216-002 BT-40 WITH 15PCS. HOLDER & ER-32 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER32 COLLET CHUCK BT40-ER32-70		3pcs.	For small Dia. End mill and Drills
2	ER32 COLLET CHUCK BT40-ER32-100		3pcs.	For small Dia. End mill and Drills
3	MORSE TAPER ADAPTOR BT40-MTA1-50		1pc.	For drills with Morse taper Shank No.1.
4	MORSE TAPER ADAPTOR BT40-MTA2-50		1pc.	For drills with Morse taper Shank No.2.
5	MORSE TAPER ADAPTOR BT40-MTA3-75		1pc.	For drills with Morse taper Shank No.3.
6	FACE MILL ARBOR BT40-FMB22-45		1pc.	For holding the face milling Cutter Dia.50, 63mm
7	FACE MILL ARBOR BT40-FMB27-45		1pc.	For holding the face milling Cutter Dia.80mm
8	END MILL HOLDER BT40-SL16-75		1pc.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
9	END MILL HOLDER BT40-SL20-90		1pc.	For straight shank end mill with Sidelock edge Dia. 20mm(WELDON Type)
10	END MILL HOLDER BT40-SL25-90		1pc.	For straight shank end mill with Sidelock edge Dia. 25mm(WELDON Type)
11	END MILL HOLDER BT40-SL32-90		1pc.	For straight shank end mill with Sidelock edge Dia. 32mm(WELDON Type)
12	ER32 SPRING COLLET ER32-dØ		11pcs.	For item 1.2. Including 11 collets as below: Ø4,5,6,8,10,12,13,15,16,18,20mm
13	PULL STUD BT-503 OR BT-504		15pcs.	BT-503 $\theta = 45^\circ$ BT-504 $\theta = 60^\circ$
14	TOOL HOLDER LOCKING STAND VTS-BT-40		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
15	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.















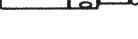


Complete NC Tooling Set



We recommend a complete set which is included tool holder, collet chuck, collet set, pull stud, tooling locking stand, edge finder for NC machining center. it is popular and suitable sale-mix in the market.

ORDER NO. VBT-40-2432 CODE NO. 3216-003 BT-40 WITH 23PCS. HOLDER & ER-32 COLLET

ITEM NO.	Descriptions	Figures	Quantity	Explanation
1	ER32 COLLET CHUCK BT40-ER32-70		4pcs.	For small Dia. End mill and Drills
2	ER32 COLLET CHUCK BT40-ER32-100		4pcs.	For small Dia. End mill and Drills
3	MORSE TAPER ADAPTOR BT40-MTA1-45		1pc.	For drills with Morse taper Shank No.1.
4	MORSE TAPER ADAPTOR BT40-MTA2-45		2pc.	For drills with Morse taper Shank No.2.
5	MORSE TAPER ADAPTOR BT40-MTA3-75		2pc.	For drills with Morse taper Shank No.3.
6	FACE MILL ARBOR BT40-FMB22-45		1pc.	For holding the face milling Cutter Dia.50, 63mm
7	FACE MILL ARBOR BT40-FMB27-45		1pc.	For holding the face milling Cutter Dia.80mm
8	END MILL ARBOR BT40-SL16-75		2pc.	For straight shank end mill with Sidelock edge Dia. 16mm(WELDON Type)
9	END MILL ARBOR BT40-SL20-90		2pc.	For straight shank end mill with Sidelock edge Dia. 20mm(WELDON Type)
10	END MILL ARBOR BT40-SL25-90		2pc.	For straight shank end mill with Sidelock edge Dia. 25mm(WELDON Type)
11	END MILL ARBOR BT40-SL32-90		2pc.	For straight shank end mill with Sidelock edge Dia. 32mm(WELDON Type)
12	ER32 SPRING COLLET ER32-dØ		11pcs.	For item 1.2. Including 11 collets as below: Ø4,5,6,8,10,12,13,15,16,18,20mm
13	PULL STUD BT-503 OR BT-504		23pcs.	BT-503 $\theta = 45^\circ$ BT-504 $\theta = 60^\circ$
14	TOOL HOLDER LOCKING STAND VTS-BT-40		1pc.	For locking the pull studs or preparing Cutting tools of tool holders.
15	ELECTRONIC EDGE FINDER VPS-20B		1pc.	For setting work coordinate on Machine Centers.





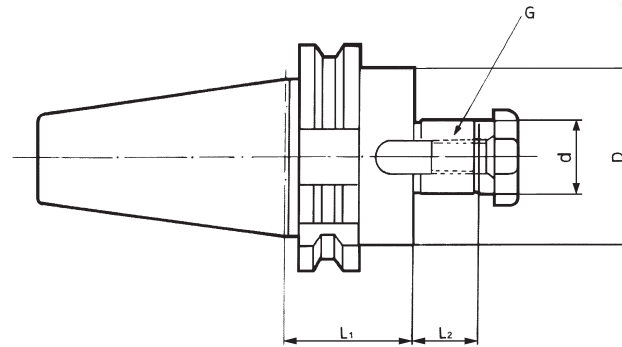
Face Mill Holder

Holder For Face Mill Cutter.
DIN69871 A



VERTEX

DIN 69871A



Unit:mm

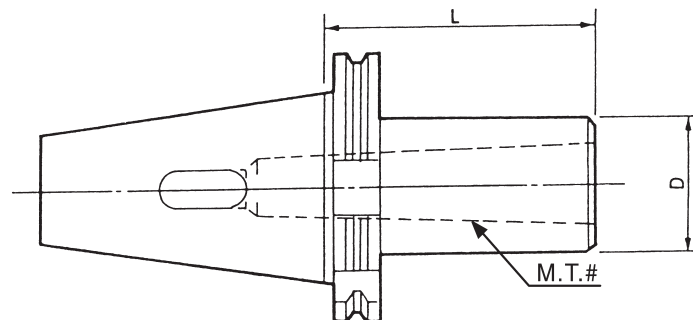
ORDER NO.	SIZE	d	D	L1	L2	G	WEIIGHT(kg)	CODE NO.
SK-112	SK40-FMB22-50	22	48	50	18	M10	1.5	3211-202
SK-113	SK40-FMB27-50	27	60	50	20	M12	1.6	3211-203
SK-114	SK40-FMB32-50	32	62	50	22	M16	2.1	3211-204
SK-117	SK50-FMB22-50	22	60	50	18	M10	3.5	3211-205
SK-118	SK50-FMB27-50	27	70	50	20	M12	3.5	3211-206
SK-119	SK50-FMB32-60	32	75	60	22	M16	3.7	3211-207
SK-120	SK50-FMB40-60	40	85	60	26	M20	4.7	3211-208



Morse Taper Holder-DIN 6383

Holder For Morse Taper Shank With Tang.
DIN69871 A

DIN 69871A



Unit:mm

ORDER NO.	SIZE	M.T.#	L	D	WEIIGHT(kg)	CODE NO.
SK-214	SK40-MT1-45	1	45	25	1	3211-133
SK-215	SK40-MT2-50	2	50	32	1	3211-134
SK-216	SK40-MT3-70	3	70	40	1.2	3211-135
SK-217	SK40-MT4-90	4	90	48	1.3	3211-136
SK-218	SK50-MT1-45	1	45	25	3	3211-137
SK-219	SK50-MT2-60	2	60	32	2.9	3211-138
SK-220	SK50-MT3-65	3	65	40	3	3211-139



Sidelock End Mill Holder

DIN69871 A

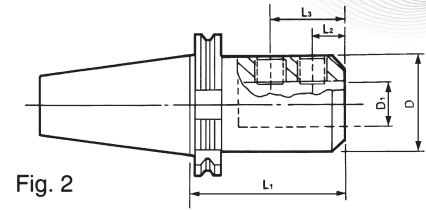
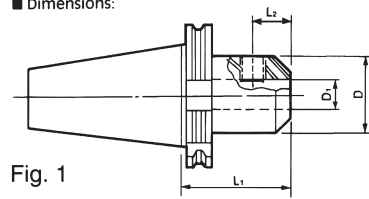
WELDON TYPE

DIN 69871A



VERTEX

■ Dimensions:



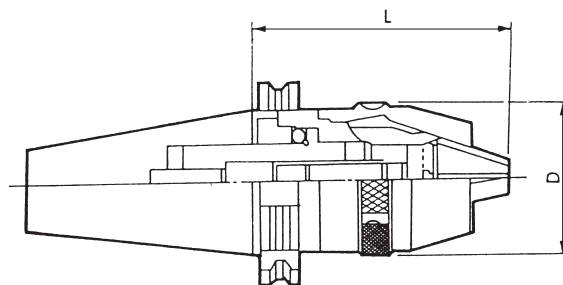
Unit:mm

ORDER NO.	SIZE	Fig.	D1	D	L1	L2	L3	WEIGHT (kg)	CODE NO.
SK-417	SK40-EM6-50	1	6	25	50	18	-	1	3213-207
SK-418	SK40-EM8-50	1	8	28	50	18	-	1.1	3213-208
SK-419	SK40-EM10-50	1	10	35	50	20	-	1.1	3213-209
SK-420	SK40-EM12-50	1	12	42	50	22.5	-	1.2	3213-210
SK-421	SK40-EM16-63	1	16	48	63	24	-	1.5	3213-211
SK-422	SK40-EM20-63	1	20	52	63	25	-	1.4	3213-212
SK-423	SK40-EM25-100	2	25	65	100	24	49	2.4	3213-213
SK-427	SK50-EM10-63	1	10	35	63	20	-	3.4	3213-217
SK-428	SK50-EM12-63	1	12	42	63	22.5	-	3.4	3213-218
SK-429	SK50-EM16-63	1	16	48	63	24	-	3.5	3213-219
SK-430	SK50-EM20-63	1	20	52	63	25	-	3.5	3213-220
SK-431	SK50-EM25-80	2	25	65	80	24	49	3.8	3213-221



Drill Chuck Holder / APU

DIN 69871A



Unit:mm

ORDER NO.	SIZE	Clamping range (Ømm)	D	L		WEIGHT (kg)	CODE NO.
				Minimum	Maximum		
SK-511	SK40-APU08-81	1-8	35.6	81	86.5	1.4	3301-001
SK-512	SK40-APU13-99	1-13	51.5	99	109	1.9	3301-002
SK-513	SK50-APU08-80	1-8	36.3	80	97.5	3.8	3301-003
SK-514	SK50-APU13-94	1-13	51.5	94	120	3.9	3301-004
SK-509	SK30-APU08-70	0.5-8	36	70	77.5	0.7	3301-005
SK-510	SK30-APU13-82	0.5-13	50	82	93.5	1.34	3301-006
SK-515	SK40-APU16-127	3-16	56	127		2.4	3301-007
SK-516	SK50-APU16-98	3-16	56	98		3.9	3301-008

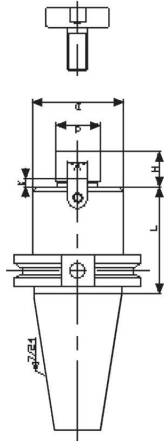


Face Mill Holder



VERTEX

CAT-FMA



ORDER NO.	L	Ød(h6)	ØD	H	K	W	CODE NO.
CAT40-FMA25.4-2.0"	2.0"	25.4	50	20	5	9.5	3213-230
CAT40-FMA31.75-2.25"	2.25"	31.75	60	22	7	12.7	3213-231
CAT40-FMA38.1-2.4"	2.4"	38.1	80	25	9	15.9	3213-232
CAT50-FMA25.4-2.0"	2.0"	25.4	50	20	5	9.5	3213-233
CAT50-FMA31.75-1.5"	1.5"	31.75	60	22	7	12.7	3213-234
CAT50-FMA38.1-2.4"	2.4"	38.1	80	25	9	15.9	3213-235
CAT50-FMA50.8-2.4"	2.4"	50.8	100	28	12	15.9	3213-236



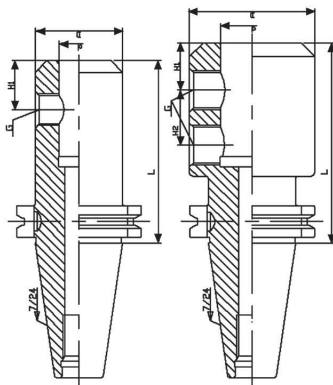
Side Lock Holders

CAT-SL



FIG 1

FIG 2

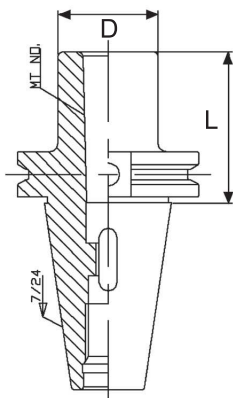


ORDER NO.	FIG	L	Ød	ØD	H1	H2	G	CODE NO.
CAT40-SL08-2.50"	1	2.5"	8	28	18	-	M8	3213-240
CAT40-SL10-2.50"			10	35	20		M10	3213-241
CAT40-SL12-2.62"		2.62"	12	42	22.5		M12	3213-242
CAT40-SL16-2.75"		2.75"	16	48	24		M14	3213-243
CAT40-SL20-3.50"		3.5"	20	48	25		M16	3213-244
CAT40-SL25-4.00"	2	4.0"	25	62	24	25	M18	3213-245
CAT40-SL32-4.00"			32	72	24	28	M20	3213-246
CAT50-SL08-2.50"	1	2.5"	8	28	18	-	M8	3213-247
CAT50-SL10-2.50"			10	35	20		M10	3213-248
CAT50-SL12-2.62"		2.62"	12	42	22.5		M12	3213-249
CAT50-SL16-2.75"		2.75"	16	48	24		M14	3213-250
CAT50-SL20-3.50"		3.5"	20	52	25		M16	3213-251
CAT50-SL25-4.00"	2	4.0"	25	65	24	25	M18	3213-252
CAT50-SL32-4.00"			32	72	24	28	M20	3213-253
CAT50-SL40-4.70"		4.7"	40	90	30	32		3213-254



Mose Taper Holders

CAT-MTA



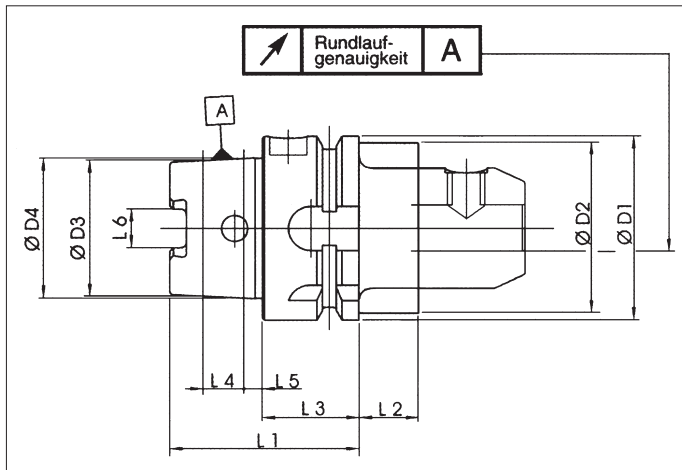
ORDER NO.	MT NO.	L	ØD	CODE NO.
CAT30-MTA2-60	2	60	32	3213-260
CAT30-MTA3-80	3	80	40	3213-261
CAT40-MTA2-60	2	60	32	3213-262
CAT40-MTA3-75	3	75	40	3213-263
CAT40-MTA4-90	4	90	50	3213-264
CAT50-MTA2-45	2	45	32	3213-265
CAT50-MTA3-45	3	45	40	3213-266
CAT50-MTA4-75	4	75	50	3213-267
CAT50-MTA5-105	5	105	65	3213-268



HSK-A63(DIN-69893) Tool Holder



Form A



Compared to the steep taper the HSK has the following advantages

- High repetition accuracy when clamping tools into spindle
- Fix axial positioning by flat contact surface
- Suitable for high speed cutting
- No pull stud necessary

Material

- Special Cast-hardening steel for highly stressed parts
- Surface hardness 58-2 HRC

Tensile strength in core min. 1000 N / mm²

DIN 69893

SIZE	ØD1	ØD2	ØD3	ØD4	L1	L2	L3	L4	L5	L6
HSK 63	63	53	46.53	48	58	16	26	14.7	6.3	12.54

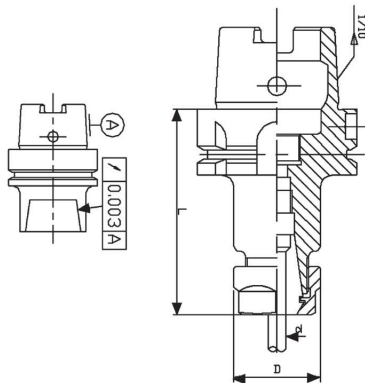


HSK-A63(DIN69893A) ER Collet Chucks

DIN69893 A

10000 R.P.M. G6.3

Caution: Excessive torque will damage the chuck, nut or collet.

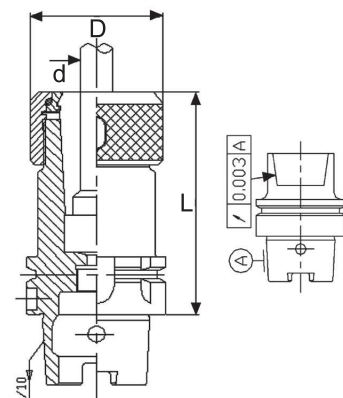


ORDER NO.	L	ØD	ØD RANG	WEIGHT (kgs)	CODE NO.
HSK-A63-ER16-100	100	30	0.5-10	1.07	3217-100
HSK-A63-ER16-150	150	30	0.5-10	1.33	3217-101
HSK-A63-ER20-100	100	35	1.0-13	1.07	3217-102
HSK-A63-ER20-150	150	35	1.0-13	1.47	3217-103
HSK-A63-ER25-100	100	42	1.0-16	1.29	3217-104
HSK-A63-ER25-150	150	42	1.0-16	1.80	3217-105
HSK-A63-ER32-100	100	50	2.0-20	1.48	3217-106
HSK-A63-ER32-150	150	50	2.0-20	2.16	3217-107
HSK-A63-ER40-100	100	63	3.0-26	1.56	3217-108
HSK-A63-ER40-150	150	63	3.0-26	2.27	3217-109
HSK-A100-ER16-100	100	30	0.5-10		3217-110
HSK-A100-ER16-150	150	30	0.5-10		3217-111
HSK-A100-ER20-100	100	35	1.0-13		3217-112
HSK-A100-ER20-150	150	35	1.0-13		3217-113
HSK-A100-ER25-100	100	42	1.0-16	2.64	3217-114
HSK-A100-ER25-150	150	42	1.0-16	3.2	3217-115
HSK-A100-ER32-100	100	50	2.0-20	2.8	3217-116
HSK-A100-ER32-150	150	50	2.0-20	3.67	3217-117
HSK-A100-ER40-100	100	63	3.0-26		3217-118
HSK-A100-ER40-150	150	63	3.0-26		3217-119



HSK-A63(DIN69893A) OZ Collet Chucks

DIN69893 A



10000 R.P.M. G6.3

ORDER NO.	L	ØD	ØD RANG	CODE NO.
HSK-A63-OZ25-100	100	60	2-25	3217-121
HSK-A63-OZ32-120	120	78	4-32	3217-122
HSK-A100-OZ25-100	100	60	2-25	3217-123
HSK-A100-OZ32-120	120	78	4-32	3217-124



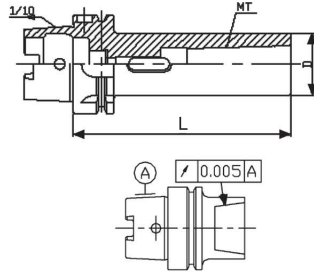
HSK-A63 Morse Taper Holders

DIN69892 A



VERTEX®

DIN 69892A



10000 R.P.M. G6.3

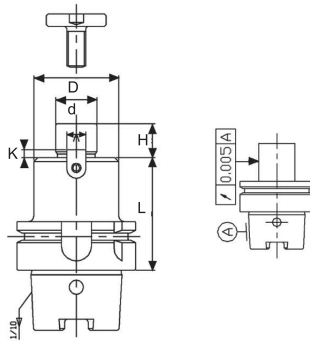
ORDER NO.	MT NO.	L	ØD	kgs	CODE NO.
HSK-A63-MTA1-100	1	100	25	1	3217-130
HSK-A63-MTA2-120	2	120	35	1.3	3217-131
HSK-A63-MTA3-140	3	140	40	1.6	3217-132
HSK-A63-MTA4-160	4	160	50	2.2	3217-133
HSK-A100-MTA1-110	1	100	25		3217-134
HSK-A100-MTA2-120	2	120	35		3217-135
HSK-A100-MTA3-150	3	140	40		3217-136
HSK-A100-MTA4-170	4	160	50		3217-137
HSK-A100-MTA5-200	5	200	65		3217-138



HSK-A63 Face Mill Holders

DIN69893 A

DIN 69893A



10000 R.P.M. G6.3

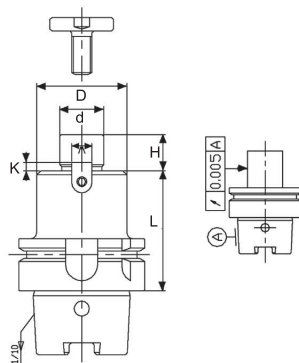
ORDER NO.	L	Ø d(h6)	ØD	H	K	W	CODE NO.
HSK-A63-FMA25.4-60	60	25.4	50	20	5	9.5	3217-140
HSK-A63-FMA25.4-120	120						3217-141
HSK-A63-FMA31.75-60	60	31.75	60	22	7	12.7	3217-142
HSK-A63-FMA31.75-120	120						3217-143
HSK-A63-FMA38.1-60	60	38.1	80	25	9	15.9	3217-144
HSK-A63-FMA38.1-120	120						3217-145
HSK-A100-FMA25.4-60	60	25.4	50	20	5	9.5	3217-146
HSK-A100-FMA25.4-120	120						3217-147
HSK-A100-FMA31.75-60	60	31.75	60	22	7	12.7	3217-148
HSK-A100-FMA31.75-120	120						3217-149
HSK-A100-FMA38.1-60	60	38.1	80	25	9	15.9	3217-150
HSK-A100-FMA38.1-120	120						3217-151
HSK-A100-FMA50.8-60	60	50.8	100	28	12	15.9	3217-152
HSK-A100-FMA50.8-120	120						3217-153



HSK-A63 Face Mill Holders

DIN69893 A0

DIN 69893A



10000 R.P.M. G6.3

ORDER NO.	L	Ø d(h6)	ØD	H	K	W	CODE NO.
HSK-A63-FMB22-50	50	22	48	18	5	10	3217-156
HSK-A63-FMB22-120	120						3217-157
HSK-A63-FMB27-60	60	27	60	20	6	12	3217-158
HSK-A63-FMB27-120	120						3217-159
HSK-A63-FMB32-60	60	32	72	22	7	14	3217-160
HSK-A63-FMB32-120	120						3217-161
HSK-A63-FMB40-60	60	40	80	25	8	16	3217-162
HSK-A63-FMB40-120	120						3217-163
HSK-A100-FMB22-50	50	22	48	18	5	10	3217-164
HSK-A100-FMB22-120	120						3217-165
HSK-A100-FMB27-60	60	27	60	20	6	12	3217-166
HSK-A100-FMB27-120	120						3217-167
HSK-A100-FMB32-60	60	32	72	22	7	14	3217-168
HSK-A100-FMB32-120	120						3217-169
HSK-A100-FMB40-60	60	40	80	25	8	16	3217-170
HSK-A100-FMB40-120	120						3217-171



DC High Speed Slim Chuck System



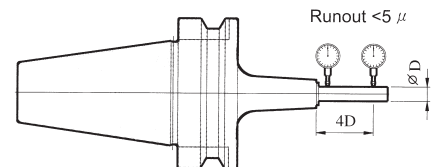
VERTEX[®]

5 μ

30.000
rpm



- Smallest outer diameter in the world: $\phi 12$; this can solve the difficulties during thin processing on mold manufacture.
- Collets with different sizes can be used on all kind of end mills, reamers, drills and tapping below 6m/m.
- High speed balancing :30,000rpm; G2.5
- Runout: <5 μ m (Length 4D)

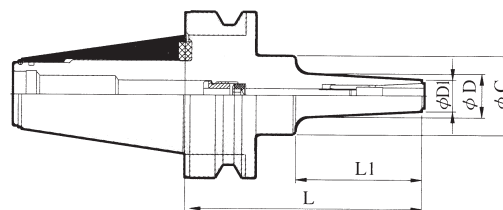


Slim Collet Chuck With Double Face Contact

DC Collet System

5 μ

30.000
rpm



- For the features of double face contact.
- Runout: below 0.005mm.(length 4D)
- Smallest outer diameter in the world: $\phi 12$ (Collet inside diameter $\phi 1.75 \sim \phi 6$)
- Max speed: 30,000rpm; G2.5.

ORDER NO.	Spindle	L	L1	D	D1	C	WEIGHT (kg)	CODE NO.
BTD30-DC6-60	BT30	60	38	16	12	-	0.5	3218-040
BTD30-DC6-90	BT30	90	50	17	12	30	0.7	3218-041
BTD40-DC6-60	BT40	60	33	16	12	-	1.1	3218-042
BTD40-DC6-90	BT40	90	48	17	12	30	1.2	3218-043

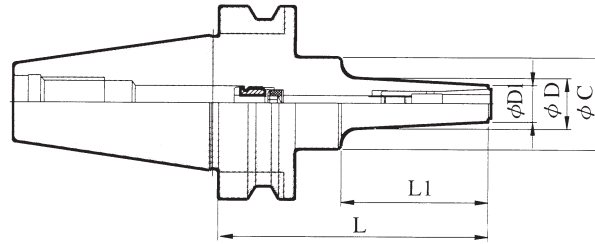


MAS BT30/40 Collet Chuck



VERTEX

DC Collet System



- Runout: below 0.005mm.(length 4D)
- Smallest outer diameter in the world : $\phi 12$ (Collet inside diameter $\phi 1.75 \sim \phi 6$)
- Max speed :30.000rpm;G2.5.

ORDER NO.	L	L1	D	D1	C	WEIGHT(kg)	CODE NO.
BT30-DC6-60	60	38	16	12	-	0.5	3218-044
BT30-DC6-90	90	50	17	12	30	0.7	3218-045
BT40-DC6-60	60	33	16	12	-	1.1	3218-046
BT40-DC6-90	90	48	17	12	30	1.2	3218-047



Cylindrical Shank Of DC Slim Chuck

DC Collet System

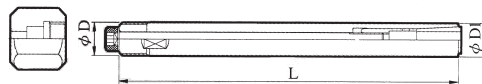


Fig. 1

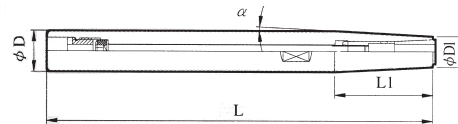


Fig. 2

- Runout: below 0.005mm.(length 4D)
- Smallest outer diameter in the world : $\phi 12$ (Collet inside diameter $\phi 1.75 \sim \phi 6$)
- Using anti-vibration material, surface hardness HRC 65°

ORDER NO.	Fig	L	L1	D	D1	α	WEIGHT(kg)	CODE NO.
ST12-DC6-120	1	120	-	12	12	-	0.4	3218-048
ST16-DC6-150	2	150	38	16	12	3°	0.4	3218-049
ST20-DC6-200	2	200	76	20	12	3°	0.6	3218-050
ST25-DC6-250	2	250	124	25	12	3°	0.9	3218-051



Set Of DC Collets And Collet Chuck

DC Collet System



ORDER NO.	Collet Chuck	Collets	Spanner	WEIGHT(kg)	CODE NO.
SST12-DC6-120E	ST12-DC6-120	EACH SET	30109-205	0.7	3218-052
SST16-DC6-150E	ST16-DC6-150	DC6-3E X 1pc	30109-205	0.7	3218-053
SST20-DC6-200E	ST20-DC6-200	DC6-4E X 1pc	30109-205	1.1	3218-054
SST25-DC6-250E	ST25-DC6-250	DC6-6E X 1pc	30109-205	1.5	3218-055



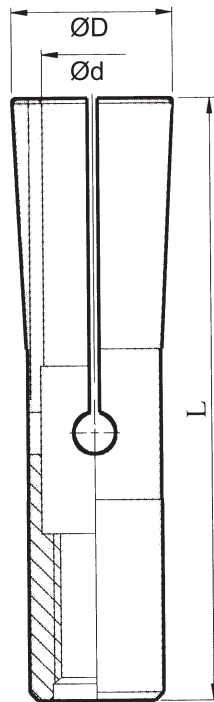
Small Collet Of Slim Collet Chuck

DC Collet System



VERTEX[®]

- Below $\varnothing 6$ can clamp any shank.
- DC6 series : for clamping drills, reamers and taps.
- DC6-E series:for clamping end mills.
- Runout : below 0.005mm. (length 4D)

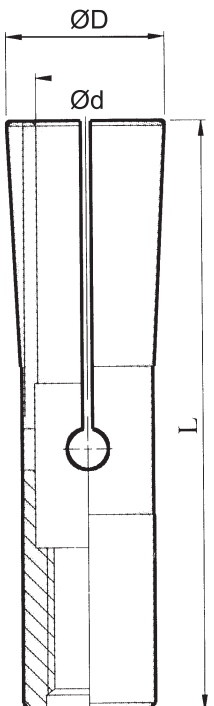


ORDER NO.	ØD	L	Range(d)	WEIGHT(kg)	CODE NO.
DC6-2	9.8	36	1.75-2.00	0.02	3218-056
DC6-2.25	9.8	36	2.00-2.25	0.02	3218-057
DC6-2.5	9.8	36	2.25-2.50	0.02	3218-058
DC6-2.75	9.8	36	2.50-2.75	0.02	3218-059
DC6-3	9.8	36	2.75-3.00	0.02	3218-065
DC6-3.25	9.8	36	3.00-3.25	0.02	3218-066
DC6-3.5	9.8	36	3.25-3.50	0.02	3218-067
DC6-3.75	9.8	36	3.50-3.75	0.02	3218-068
DC6-4	9.8	36	3.75-4.00	0.02	3218-069
DC6-4.25	9.8	36	4.00-4.25	0.02	3218-070
DC6-4.5	9.8	36	4.25-4.50	0.02	3218-071
DC6-4.75	9.8	36	4.50-4.75	0.02	3218-072
DC6-5	9.8	36	4.75-5.00	0.02	3218-073
DC6-5.25	9.8	36	5.00-5.25	0.02	3218-074
DC6-5.5	9.8	36	5.25-5.50	0.02	3218-075
DC6-5.75	9.8	36	5.50-5.75	0.02	3218-076
DC6-6	9.8	36	5.75-6.00	0.02	3218-077



Collet For End Mill Shank

DC Collet System



ORDER NO.	Ød	ØD	L	WEIGHT(kg)	CODE NO.
DC6-3E	3	9.6	36	0.02	3218-078
DC6-4E	4	9.6	36	0.02	3218-079
DC6-6E	6	9.6	36	0.02	3218-081



High Speed Chuck



VERTEX®

UC COLLET CHUCK

For clamping HSC(High speed cutting) tools on machining centers.

Maximum speed:15,000 R.P.M.

High accuracy:0.005mm T.I.R

Features

Taper of UC spring collet is 1/120, self-locked function makes high gripping power to prevent slip-out of the cutting tools.

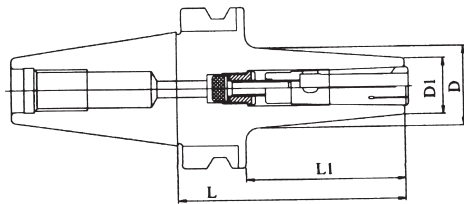
UC spring collet chucks are made by high alloy steel and cast hardened up to HRC59° and ground to ultra precision.

UC spring collets are slit with a patented slotted-design for increasing gripping power and accuracy. (PAT.103654)

NEW

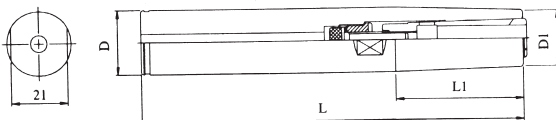


UC



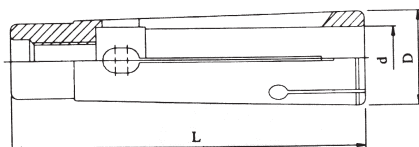
ORDER NO.	L	L1	D	D1	Collets	WEIGHT (kgs)	CODE NO.
BT30-UC10-70	70	48	30	22	UC10	0.7	3218-001
BT40-UC10-90	90	63	32	22	UC10	1.4	3218-002
BT40-UC16-90	90	63	40	30	UC16	1.5	3218-003
BT50-UC10-110	110	72	36	22	UC10	4.1	3218-004
BT50-UC16-120	120	82	42	30	UC16	4.5	3218-005

STRAIGHT SHANK UC CHUCK



ORDER NO.	L	L1	D	D1	Collets	WEIGHT (kg)	CODE NO.
C25-UC10-150	150	50	25	22	UC10	0.6	3218-030
C25-UC10-200	200	50	25	22	UC10	0.8	3218-031

UC SPRING COLLETS



ORDER NO.	d	D	L	WEIGHT(kg)	CODE NO.
UC10-6	6	15	56.5	0.06	3218-060
UC10-8	8			0.05	3218-061
UC10-10	10			0.04	3218-062
UC16-10	10	21	67	0.12	3218-090
UC16-12	12			0.11	3218-091
UC16-14	14			0.09	3218-092
UC16-16	16			0.07	3218-093

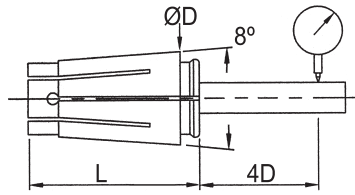


SK Spring Collet System



JIS STD.

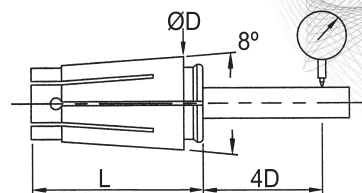
15000 R.P.M.



TYPE	D	L
SK6	10.5	25
SK10	15.5	30.5
SK16	24.5	45
SK20	29.5	50
SK25	35.5	57

THE GRIPPING RANGE OF DIA. BELOW 3MM IS 0.25MM
THE GRIPPING RANGE OF DIA. OVER 3MM IS 0.5MM
THE RUNOUT OF A COLLET IS 10μ.

TYPE	SK-6				SK-10				SK-16				SK-20				SK-25			
	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.
INDIVIDUAL UNIT	SK0601A	2	2-1.75	3218-400	SK1001A	2	2-1.75	3218-411	SK1601A	3	3-2.75	3218-430	SK2001A	3	3-2.75	3218-460	SK2501A	6	6-5.5	3218-470
	SK0602A	2.5	2.5-2.25	3218-401	SK1002A	2.5	2.5-2.25	3218-412	SK1602A	3.175	3.175-2.7	3218-431	SK2002A	4	4-3.5	3218-461	SK2502A	8	8-7.5	3218-471
	SK0603A	3	3-2.75	3218-402	SK1003A	3	3-2.75	3218-413	SK1603A	3.5	3.5-3	3218-432	SK2003A	6	6-5.5	3218-462	SK2503A	10	10-9.5	3218-472
	SK0604A	3.5	3.5-3	3218-403	SK1004A	3.175	3.175-2.7	3218-414	SK1604A	4	4-3.5	3218-433	SK2004A	8	8-7.5	3218-463	SK2504A	12	12-11.5	3218-473
	SK0605A	4	4-3.5	3218-404	SK1005A	3.5	3.5-3	3218-415	SK1605A	4.5	4.5-4	3218-434	SK2005A	10	10-9.5	3218-464	SK2505A	14	14-13.5	3218-474
	SK0606A	4.5	4.5-4	3218-405	SK1006A	4	4-3.5	3218-416	SK1606A	5	5-4.5	3218-435	SK2006A	12	12-11.5	3218-465	SK2506A	16	16-15.5	3218-475
	SK0607A	5	5-4.5	3218-406	SK1007A	4.5	4.5-4	3218-417	SK1607A	5.5	5.5-5	3218-436	SK2007A	16	16-15.5	3218-466	SK2507A	18	18-17.5	3218-476
	SK0608A	5.5	5.5-5	3218-407	SK1008A	5	5-4.5	3218-418	SK1608A	6	6-5.5	3218-437	SK2008A	20	20-19.5	3218-467	SK2508A	20	20-19.5	3218-477
	SK0609A	6	6-5.5	3218-408	SK1009A	5.5	5.5-5	3218-419	SK1609A	6.5	6.5-6	3218-438					SK2509A	22	22-21.5	3218-478
					SK1010A	6	6-5.5	3218-420	SK1610A	7	7-6.5	3218-439					SK2510A	24	24-23.5	3218-479
					SK1011A	6.5	6.5-6	3218-421	SK1611A	7.5	7.5-7	3218-440					SK2511A	25	25-24.5	3218-480
					SK1012A	7	7-6.5	3218-422	SK1612A	8	8-7.5	3218-441					SK2512A	25.4	25.4-25	3218-481
					SK1013A	7.5	7.5-7	3218-423	SK1613A	8.5	8.5-8	3218-442								
					SK1014A	8	8-7.5	3218-424	SK1614A	9	9-8.5	3218-443								
					SK1015A	8.5	8.5-8	3218-425	SK1615A	9.5	9.5-9	3218-444								
					SK1016A	9	9-8.5	3218-426	SK1616A	10	10-9.5	3218-445								
					SK1017A	9.5	9.5-9	3218-427	SK1617A	10.5	10.5-10	3218-446								
					SK1018A	10	10-9.5	3218-428	SK1618A	11	11-10.5	3218-447								
									SK1619A	11.5	11.5-11	3218-448								
									SK1620A	12	12-11.5	3218-449								
									SK1621A	12.5	12.5-12	3218-450								
									SK1622A	13	13-12.5	3218-451								
									SK1623A	13.5	13.5-13	3218-452								
									SK1624A	14	14-13.5	3218-453								
									SK1625A	14.5	14.5-14	3218-454								
									SK1626A	15	15-14.5	3218-455								
									SK1627A	15.5	15.5-15	3218-456								
									SK1628A	16	16-15.5	3218-457								



THE GRIPPING RANGE OF DIA. BELOW 3MM IS 0.25MM
 THE GRIPPING RANGE OF DIA. OVER 3MM IS 0.5MM
 THE RUNOUT OF AA COLLET IS 5μ.

TYPE	SK-6				SK-10				SK-16				SK-20				SK-25			
	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.	ORDER NO.	ØD	CAP. mm Ø	CODE NO.
INDIVIDUAL UNIT	SK0601AA	2	2-1.75	3218-500	SK1001AA	2	2-1.75	3218-511	SK1601AA	3	3-2.75	3218-530	SK2001AA	3	3-2.75	3218-560	SK2501AA	6	6-5.5	3218-570
	SK0602AA	2.5	2.5-2.25	3218-501	SK1002AA	2.5	2.5-2.25	3218-512	SK1602AA	3.175	3.175-2.7	3218-531	SK2002AA	4	4-3.5	3218-561	SK2502AA	8	8-7.5	3218-571
	SK0603AA	3	3-2.75	3218-502	SK1003AA	3	3-2.75	3218-513	SK1603AA	3.5	3.5-3	3218-532	SK2003AA	6	6-5.5	3218-562	SK2503AA	10	10-9.5	3218-572
	SK0604AA	3.5	3.5-3	3218-503	SK1004AA	3.175	3.175-2.7	3218-514	SK1604AA	4	4-3.5	3218-533	SK2004AA	8	8-7.5	3218-563	SK2504AA	12	12-11.5	3218-573
	SK0605AA	4	4-3.5	3218-504	SK1005AA	3.5	3.5-3	3218-515	SK1605AA	4.5	4.5-4	3218-534	SK2005AA	10	10-9.5	3218-564	SK2505AA	14	14-13.5	3218-574
	SK0606AA	4.5	4.5-4	3218-505	SK1006AA	4	4-3.5	3218-516	SK1606AA	5	5-4.5	3218-535	SK2006AA	12	12-11.5	3218-565	SK2506AA	16	16-15.5	3218-575
	SK0607AA	5	5-4.5	3218-506	SK1007AA	4.5	4.5-4	3218-517	SK1607AA	5.5	5.5-5	3218-536	SK2007AA	16	16-15.5	3218-566	SK2507AA	18	18-17.5	3218-576
	SK0608AA	5.5	5.5-5	3218-507	SK1008AA	5	5-4.5	3218-518	SK1608AA	6	6-5.5	3218-537	SK2008AA	20	20-19.5	3218-567	SK2508AA	20	20-19.5	3218-577
	SK0609AA	6	6-5.5	3218-508	SK1009AA	5.5	5.5-5	3218-519	SK1609AA	6.5	6.5-6	3218-538					SK2509AA	22	22-21.5	3218-578
					SK1010AA	6	6-5.5	3218-520	SK1610AA	7	7-6.5	3218-539					SK2510AA	24	24-23.5	3218-579
					SK1011AA	6.5	6.5-6	3218-521	SK1611AA	7.5	7.5-7	3218-540					SK2511AA	25	25-24.5	3218-580
					SK1012AA	7	7-6.5	3218-522	SK1612AA	8	8-7.5	3218-541					SK2512AA	25.4	25.4-25	3218-581
					SK1013AA	7.5	7.5-7	3218-523	SK1613AA	8.5	8.5-8	3218-542								
					SK1014AA	8	8-7.5	3218-524	SK1614AA	9	9-8.5	3218-543								
					SK1015AA	8.5	8.5-8	3218-525	SK1615AA	9.5	9.5-9	3218-544								
					SK1016AA	9	9-8.5	3218-526	SK1616AA	10	10-9.5	3218-545								
					SK1017AA	9.5	9.5-9	3218-527	SK1617AA	10.5	10.5-10	3218-546								
					SK1018AA	10	10-9.5	3218-528	SK1618AA	11	11-10.5	3218-547								
									SK1619AA	11.5	11.5-11	3218-548								
									SK1620AA	12	12-11.5	3218-549								
									SK1621AA	12.5	12.5-12	3218-550								
									SK1622AA	13	13-12.5	3218-551								
									SK1623AA	13.5	13.5-13	3218-552								
									SK1624AA	14	14-13.5	3218-553								
									SK1625AA	14.5	14.5-14	3218-554								
									SK1626AA	15	15-14.5	3218-555								
									SK1627AA	15.5	15.5-15	3218-556								
									SK1628AA	16	16-15.5	3218-557								



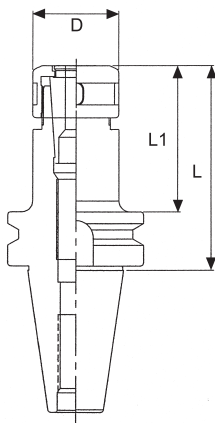
BT-SK Collet Chuck System



VERTEX

AA

JIS STD.



- 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-220	BT-40-SK20-120	SK20	3-20	50	120	93	1.4	3218-619
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



Set Of SK Collet And MAS BT 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
SK16/8pcs : Ø3, 4, 6, 8, 10, 12, 14, 16
SK20/8pcs : Ø4, 6, 8, 10, 12, 14, 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



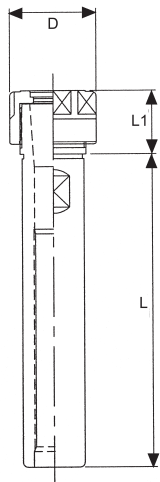
ST-SK Straight Chuck

JIS STD.

15000 R.P.M.



VERTEX



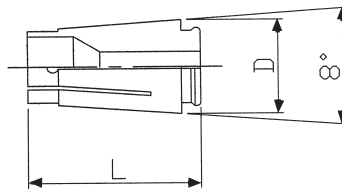
ORDER NO.	TYPE	COLLET	D	L	L1	WEIGHT(kg)	CODE NO.
SKS-210	ST-20-SK6-100	SK6	20	100	20	0.25	3218-660
SKS-211	ST-20-SK6-150	SK6	20	150	20	0.3	3218-661
SKS-212	ST-20-SK10-100	SK10	28	100	20	0.3	3218-662
SKS-213	ST-20-SK10-150	SK10	28	150	20	0.45	3218-663
SKS-214	ST-20-SK10-200	SK10	28	200	20	0.55	3218-664



Set Of SK Collet And Straight Chuck

JIS STD.

15000 R.P.M.



SK COLLET SET

METRIC RANGE SET SIZE

SK06/5pcs : Ø2, 3, 4, 5, 6

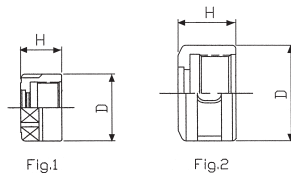
SK10/8pcs : Ø3, 4, 5, 6, 7, 8, 9, 10

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



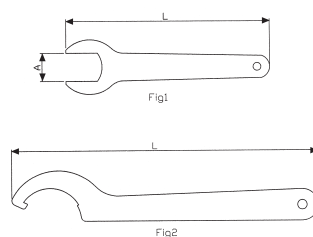
SK Nut And Wrench

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	D	H	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

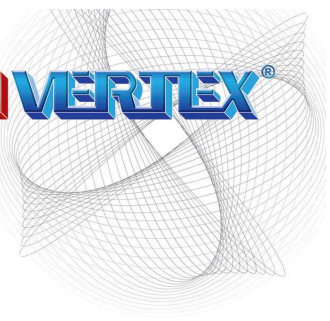


ER Collet Chuck System

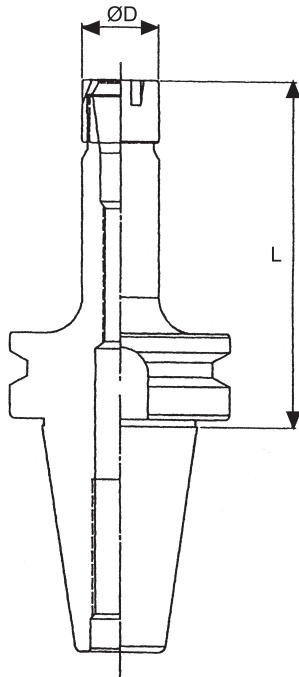
MAS403 BT30/40/50 SHANK



VERTEX



ULTRA PRECISION TYPE
MAX. SPEED: 15,000RPM; G2.5
DYNAMIC BALANCE TESTED



ORDER NO.	L	ØD	COLLET	WEIGHT (kg)	CODE NO.
BT30-ER11-60-B	60	19	ER11	0.5	3033-500
BT30-ER11-100-B	100	19	ER11	0.55	3033-501
BT30-ER16-60-B	60	28	ER16	0.5	3033-502
BT30-ER16-100-B	100	28	ER16	0.7	3033-503
BT30-ER20-60-B	60	34	ER20	0.55	3033-504
BT30-ER20-100-B	100	34	ER20	0.8	3033-505
BT30-ER25-60-B	60	42	ER25	0.6	3033-506
BT30-ER32-60-B	60	50	ER32	0.65	3033-507
BT40-ER11-70-B	70	19	ER11	1	3033-509
BT40-ER11-100-B	100	19	ER11	1.1	3033-510
BT40-ER16-70-B	70	28	ER16	1.1	3033-511
BT40-ER16-100-B	100	28	ER16	1.2	3033-512
BT40-ER20-70-B	70	34	ER20	1.2	3033-514
BT40-ER20-100-B	100	34	ER20	1.4	3033-515
BT40-ER25-70-B	70	42	ER25	1.2	3033-518
BT40-ER25-100-B	100	42	ER25	1.45	3033-519
BT40-ER32-70-B	70	50	ER32	1.3	3033-521
BT40-ER32-100-B	100	50	ER32	1.5	3033-522
BT30-ER11M-100-B	100	16	ER11	0.5	3033-523
BT30-ER16M-100-B	100	22	ER16	0.55	3033-524
BT30-ER20M-100-B	100	28	ER20	0.65	3033-525
BT40-ER11M-100-B	100	16	ER11	1.05	3033-526
BT40-ER16M-100-B	100	22	ER16	1.1	3033-527
BT40-ER20M-100-B	100	28	ER20	1.2	3033-528

**3D-Taster**

ORDER NO.V-3D

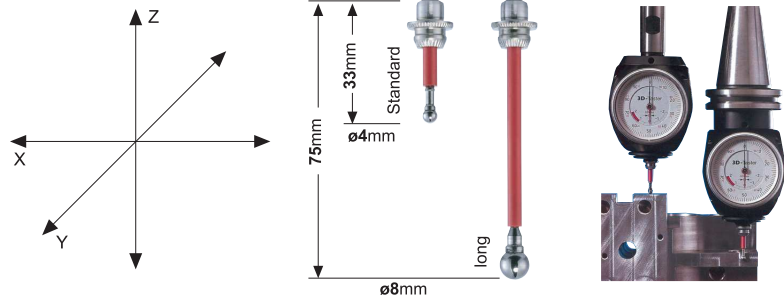
CODE NO.3219-001

**VERTEX****STYLUS****Change stylus in seconds**

No screws or special tools required
Easy precision plug-in mechanism

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 caliper 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: 0.93KGS



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

**Integrated Type Keyless Drill Chucks**

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"	CAT50	Ø58	2.26	3301-077
INT-13-CAT50	0.5-13	1/64"-1/2"		Ø51.5	3.95	3301-078
INT-16-CAT50	3-16	1/8"-5/8"	CAT50	Ø58	4.2	3301-079

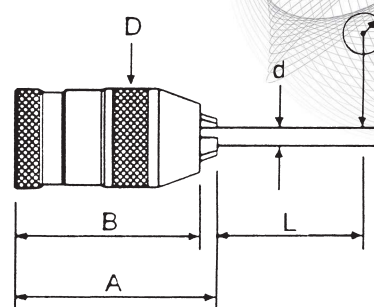
**Integrated Type Keyless Drill Chucks****RL type keyless drill chuck with BT SHANK**

- 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



Integrated Type Keyless Drill Chucks



STANDARD ACCES.

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.
- 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.

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		

ORDER NO.	Clamping Capacity		Female Taper DIN or Jacobs	STD	OUTER Ø / mm	Length		WEIGHT (kgs)	CODE NO.
	Ø mm	Ø inch				Open B mm	Closed A mm		
INT-8-MT-2	0-8	0-5/16"	MT-2		35	140	148	0.8	3301-030
INT-8-JC-20	0-8	0-5/16"	JC-20		35	124	132	0.8	3301-031
INT-8-BT30	0.5-8	1/64"-1/8"	BT30		35			1	3301-070
INT-8-BT40	0.5-8	1/64"-1/8"	BT40		51.5			1.5	3301-072
INT-8-NT30	0.5-8	1/64"-1/8"	NT30		51.5			0.8	3301-080
INT-8-NT40	0.5-8	1/64"-1/8"	NT40		51.5			1.3	3301-081
INT-13-R8	1-13	0-1/2"	R8		51.5	183	175	1.5	3301-032
INT-13-MT2	1-13	0-1/2"	MT-2		51.5	184	172	1.3	3301-082
INT-13-MT3	1-13	0-1/2"	MT-3		51.5	182	194	1.4	3301-033
INT-13-MT4	1-13	0-1/2"	MT-4		51.5	182	194	1.8	3301-034
INT-13-JC-20	1-13	0-1/2"	JC-20		51.5	138	150	1.4	3301-035
INT-13-JC-25	1-13	0-1/2"	JC-25		51.5	138	150	1.6	3301-036
INT-13-JC-32	1-13	0-1/2"	JC-32		51.5	138	150	1.8	3301-037
INT-13-NT30	1-13	0-1/2"	NT-30		51.5	138	150	1.4	3301-038
INT-13-NT40	1-13	0-1/2"	NT-40	DIN 2080	51.5	98	109	1.8	3301-039
INT-13-BT30	0.5-13	1/64"-1/2"	BT30		51.5			1.4	3301-071
INT-13-BT40	1-13	0-1/2"	BT-40	ISO	51.5	98	109	2	3301-040
INT-13-BT50	1-13	0-1/2"	BT-50	ISO	51.5	109	120	4.7	3301-041
INT-13-NT50	1-13	0-1/2"	NT-50		51.5			4.3	3301-059
INT-16-R8	3-16	1/8"-5/8"	R8		58	188	202	1.9	3301-042
INT-16-MT3	3-16	1/8"-5/8"	MT3		58	188	202	1.9	3301-043
INT-16-MT4	3-16	1/8"-5/8"	MT4		58	188	202	2	3301-044
INT-16-JC-20	3-16	1/8"-5/8"	JC-20		58	140	155	1.8	3301-045
INT-16-JC-25	3-16	1/8"-5/8"	JC-25		58	150	165	1.7	3301-046
INT-16-JC-32	3-16	1/8"-5/8"	JC-32		58	150	165	2.2	3301-047
INT-16-NT40	3-16	1/8"-5/8"	NT-40	ISO	58	116	130	2.6	3301-049
INT-16-BT40	3-16	1/8"-5/8"	BT-40	ISO	58	116	130	2.5	3301-050
INT-16-BT50	3-16	1/8"-5/8"	BT-50		58	126	140	5	3301-051
INT-16-NT50	3-16	1/8"-5/8"	NT-50		58			4.5	3301-056

Please notify Taper or Jacobs size when ordering.



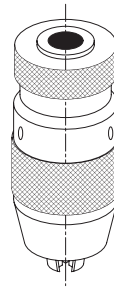
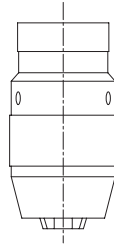
Keyless Drill Chucks

TYPE: XHSP



VERTEX


SPECIAL HEAVY DUTY TYPE



OPTIONAL ACCES.

- 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: 50mm length within 0.05mm
- The key is optional

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	0-8	0-5 / 16"	B10	36	61	69	320	40/0.6	13/14	3302-002
11016				J1	36	61	69	320	40/0.6	13/14	3302-003
11017				B12	36	61	69	320	40/0.6	13/14	3302-004
11018	10XHSP	0-10	0-3 / 8"	J33	43	81	92	700	40/0.6	28/29	3302-005
11019				J2S	43	81	92	700	40/0.6	28/29	3302-006
11020				B12	43	81	92	700	40/0.6	28/29	3302-007
11021				B16	43	81	92	700	40/0.6	28/29	3302-008
11025	13XHSP	0-13	0-1 / 2"	J6	51.5	92	103	1030	30/0.6	31/32	3302-009
11026				J33	51.5	92	103	1035	30/0.6	31/32	3302-010
11027				B16	51.5	92	103	1030	30/0.6	31/32	3302-011
11028	16XHSP	3-16	1/8 - 5/8"	J6	58	95	108	1450	24/0.6	35/36	3302-012
11029				B16	58	95	108	1450	24/0.6	35/36	3302-013
11030				B18	58	95	108	1450	24/0.6	35/36	3302-014
11035				J3	58	95	108	1450	24/0.6	35/36	3302-015
17000	6XHSP	0.5-6.5	1/64"- 1/4"	B12	34	61	69	320	8/0.6	26/27	3304-010
17002				J1	34	61	69	320	8/0.6	26/27	3304-011
17004				B10	34	61	69	320	8/0.6	26/27	3304-012
11031	Key	13XHSP									3304-001
11032		16XHSP									3304-002
11033		8XHSP									3304-003
11034		10XHSP									3304-004



Keyless Drill Chucks

TYPE: H

STANDARD TYPE



Unit:mm

- 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

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	6H	0-6.5	0-1 / 4"	J1	34	61	69	410	3302-030
11062				B10	34	61	69	400	3302-031
11063	8H	0-8	0-5 / 16"	J1	34	61	69	400	3302-032
11064				B10	34	71	69	400	3302-033
11065	10H	0-10	0-3 / 8"	J2S	42.5	81	92	720	3302-034
11066				J33	42.5	81	92	700	3302-035
11067				B12	42.5	81	92	720	3302-036
11068				B16	42.5	81	92	700	3302-037
11070	13H	0-13	0-1 / 2"	J6	50.5	92	103	1070	3302-039
11071				J33	50.5	92	103	1035	3302-040
11072	16H	3-16	1/8 - 5/8"	B16	50.5	92	103	1080	3302-041
11073				J6	50.5	92	103	1070	3302-042
11074				B16	50.5	92	103	1080	3302-043
11075				B18	50.5	97	108	1090	3302-044



Keyless Drill Chucks

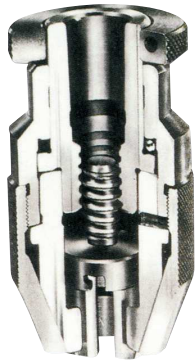
TYPE:S

HEAVY DUTY TYPE S



VERTEX®

Extremely 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	0-8	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	0-10	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	0-13	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



Keys



ORDER NO.	Type	Dmm	Lmm	Weight(g)	Packing	CODE NO.
14001	T1	3.2	35	20	Unpacked	3304-100
14002	T2	4	42	40		3304-101
14003	T3	5.5	44	45		3304-102
14004	T4	S2	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
14010	P1	4	42	40		3304-109
14011	P2	5.5	44	45		3304-110
14012	P3	6	45	55		3304-111
14013	P4	6.5	45	50		3304-112
14014	P5	7	45	50		3304-113
14015	P6	8	50	80		3304-114
14016	P7	9.5	65	150		3304-115
14101	CK1	5/32	361	25		3304-117
14102	CK2	1/4	-	-		3304-118
14104	CK4	3/8	74	180		3304-120
14105	K30	15/64	43	40		3304-121
14106	K32	1/4	50	60		3304-122
14108	KG	1/4	35	25		3304-124



Key Type Drill Chucks

TYPE: G



- Representative 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 the precision can be lsted.
- The taper is precision ground, advance the precision.
- Accuracy: 90mm length within 0.08mm
- 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	40	50	200	CK3	100/0.82	20/21	3303-001
10017	G-10XH	0.5-10	1-64"-3/8"	J2	41.5	50.5	64	390	CK4	60/0.85	24/25	3303-003
10018				J2S	41.5	50.5	64	390	CK4	60/0.85	24/25	3303-004
10050	G-13XH	0.5-13	1/64"-1/2"	J6	56	69	82	800	P6	36/0.83	30/31	3303-006
10051				B16	56	69	82	800	P6	36/0.83	30/31	3303-007
10052				J33	56	69	82	800	P6	36/0.83	30/31	3303-008
10068	G-16XH	1-16	1/32"-5/8"	J3	65	78	96	1000	P7	24/0.84	24/25	3303-009
10070				B18	65	78	96	1000	P7	24/0.84	24/25	3303-010
10074	G-19XH	3-19	1/8"-3/4"	J4	74	89	126	2150	P7	18/0.83	39/40	3303-011



Ball Bearing Key Type Super Chucks

TYPE: H



- Suitable for heavy duty drilling use.
- By using anti-thrust bearing to increase the gripping power so that high speed drilling can be performed.
- All parts hardened by heat treatment and precision ground precision can be lasted, super clamping power.
- Accuracy:100m/m length is within 0.08m/m
- With keys

ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	OUTER Ø / mm	Length		Wt g	Key Size	CODE NO.
		mm	inch			Open B mm	Closed A mm			
12011	10BXH	1-10	1/32"-3/8"	J2S	45	56	64	390	P4	3303-030
12006	13BXH	1-13	1/32"-1/2"	J3	62	75	95	1200	P6	3303-031
12001				J6						3303-032
12002				J33						3303-033
12003	16BXH	1-16	1/32"-5/8"	J3	65	81	101	1500	P7	3303-034
12005	19BXH	1-19	1/32"-3/4"	J4	74	100	130	2150	P7	3303-036
12007	25BXH	5-25	3/16"-1"	J5	93	112	153	4100	T9	3303-037



Key Type Drill Chucks


VERTEX®


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

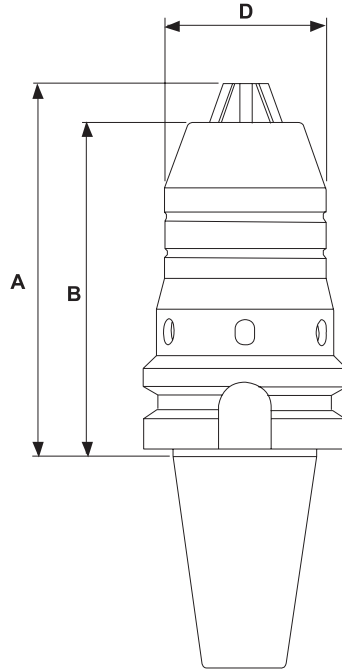
ORDER NO.	TYPE	Clamping Capacity		Female Taper DIN or Jacobs	Female Thread Inch or metric	OUTER Ø / mm	Length		Wt g	Key Size	CODE NO.
		mm	inch				Open B mm	Closed A mm			
10001	4H	0.5-4	1/64"-5/32"	JO		22	29	35	120	T1	3303-060
10002B	5HB	0.5-6		5D		27.5	33	43	100	T2A	3303-061
10003	6H	0.5-6.5	1/64"-1/4"	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
10010-3					1/2-20	38	50.5	64	290	T3	3303-065-3
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	16H	1-16	1/32"-5/8"	J33		47	65	81	580	T5	3303-074
10061				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
10063-2					1/2-20	56	78	96	800	T7	3303-079-2
10063-3					5/8-16	56	78	96	800	T7	3303-079-3
10064	19H	3-19	1/8"-3/4"	B18		56	78	96	970	T7	3303-080
10072				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
10047				B16	1/2-20	52	69	82	830	T7	3303-087
10048				J33	1/2-20	52	69	82	770	T7	3303-088
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

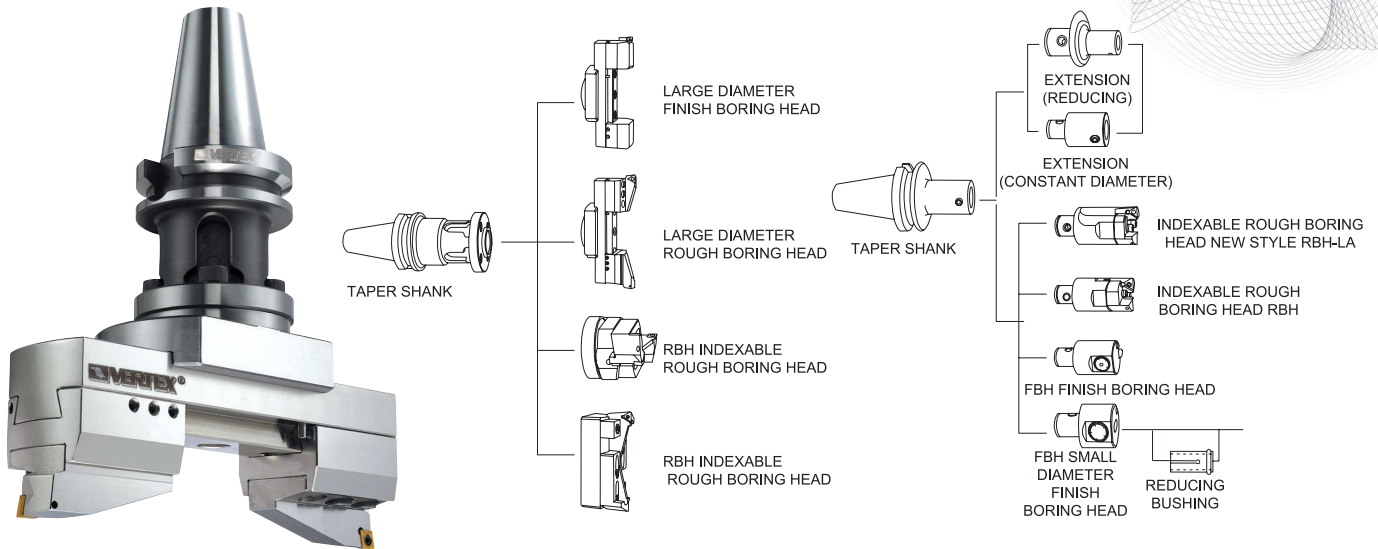
Run-out Accuracy & Torque Inspection Table

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



- The shank and keyless drill chuck are combined as one body so that the drill chuck will not be fallen out when heavy cutting is being performed.
- High precision can be maintained over a long period of time.
- The drill will not be dropped out when the main spindle of machine is instantly stopped.
- (1) 2-way machining function-clockwise (CW) and counter-clockwise (CCW).
- (2) Built in torque setting and anti-loose device.
- (3) External hook locking type doesn't need a hex wrench which is ease to be worn out and became slippery.
- (4) Fast locking ring outside the arbor.
- The traditional or conventional holding needs a lot of chucks, the cost is very high.
New tech brings you convenience and the lowest cost.
- No more frequently change, save your time and money.
- The tolerance can reach to 0.05mm or better.
- Suit for every kind of machine tool cutters. Capable of drilling, tapping, twist milling and so on.

ORDER NO.	Mount Type	Size	Capacity		Dimensions			Weight (g)	CODE NO.
			mm	inch	Close A mm	Open B mm	sleeve D mm		
PNT-8-BT-30	BT30	8mm	0-8	0-5/16	92	83	37.5	820	3303-151
PNT-13-BT-30	BT30	13mm	0-13	0-1/2	115	102	50		3303-152
PNT-8-BT-40	BT40	8mm	0-8	0-5/16	96	87	37.5		3303-153
PNT-13-BT-40	BT40	13mm	0-13	0-1/2	115	102	50	1900	3303-154
PNT-16-BT-40	BT40	16mm	3-16	1/8-5/8	121.5	108.5	57		3303-155
PNT-8-BT-50	BT50	8mm	0-8	0-5/16	106	98	37.5		3303-156
PNT-13-BT-50	BT50	13mm	0-13	0-1/2	126.2	115.5	50		3303-157
PNT-16-BT-50	BT50	16mm	3-16	1/8-5/8	132.5	119.5	57		3303-158

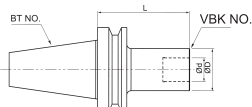
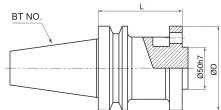


Taper Shank For Boring Heads Series BST, VBK

BST SERIES



VBK SERIES



ORDER NO.	Length (L)	External Diameter (D)	Applicable Boring Heads	Weight (kgs)	CODE NO.
BT40-VBK1-75	75	19	FBH20	1.2	3320-220
BT40-VBK2-85	85	23	RBH25 ; FBH25	1.2	3320-221
BT40-VBK3-95	95	30	RBH32 ; FBH32	1.45	3320-222
BT40-VBK4-85	85	38	RBH40 ; FBH40 ; CBI4	1.5	3320-223
BT40-VBK5-75	75	50	RBH52 ; FBH25 ; CBI5	1.8	3320-225
BT40-VBK6-65	65	64	RBH68 ; RBH90 ; FBH68 FBH100 ; FBH150 ; CBI6	2.15	3320-227
BT40-BST-70	70	95	RBH120 ; FBH200 RBH120 and above; FBH200 and above	3.2	3320-228
BT50-VBK1-115	115	19	FBH20	3.5	3320-229
BT50-VBK2-110	110	23	RBH25 ; FBH25	4	3320-230
BT50-VBK3-125	125	30	RBH32	4.4	3320-232
BT50-VBK4-115	115	38	RBH40	4.8	3320-234
BT50-VBK4-175	175			5.2	3320-235
BT50-VBK5-105	105	50	RBH52	5.4	3320-236
BT50-VBK5-180	180			6.2	3320-237
BT50-VBK5-240	240			6.4	3320-238
BT50-VBK6-95	95	64	RBH68 ; RBH90 ; FBH68 FBH100 ; FBH150 ; CBI6	5.9	3320-239
BT50-VBK6-170	170			6.5	3320-240
BT50-VBK6-230	230			6.9	3320-241
BT50-BST-100	100	95	RBH120 RBH120 and above; FBH200 and above; large diameter boring heads series	5.71	3320-242
BT50-BST-200	200			8.79	3320-244
BT50-BST-300	300			11.25	3320-246
BT50-BST-400	400				3320-247



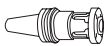

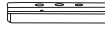

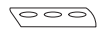

Large Diameter Twin-bit Rough Boring


VERTEX®

New Modular Style For Diameter Over 200mm

Boring diameter from $\varnothing 200$ - $\varnothing 1250$ mm



Boring Head Type	ORDER NO.		RBH 200LA	RBH 300LA	RBH 400LA	RBH 500LA	RBH 600LA	RBH 900LA	
	Length		130	130	130	130	150	150	
	(kgs) Total Weight Steel/Alloy		9.5/7.2	11.5/8.0	13.5/8.8	15.5/9.6	33/16	43/22.3	
	D(mm) Boring Diameter		200-310	300-410	400-510	500-610	600-950	900-1250	
Module	Taper Shank		BT50-BST / NT50-BST BT50-BST / NT50-BST Series					BT50-FMA-47.625	
	Flange (kgs)Weight Steel/Alloy		BR200 2.7					BR600	BR900
								19kg/6.5kg	29kg/10kg
	Extension Slide		RST200	RST300	RST400	RST500	RST300 x2pcs	RST400 x2pcs	
	(kg)Weight Steel/Alloy		3.4kg/1.1kg	5.4kg/1.9kg	7.4kg/2.7kg	9.4kg/3.5kg	10.8kg/3.8kg	14.8kg/5.4kg	
	Clamp Base (kg)Weight		RS200 0.98 kg						
	Height Seting Shim (kg)Weight		RS201 0.05 kg						
	Insert Holder		RB200C12		RB200T16		RB200T22		RB200S12
	Applicable Insert		CCMT120404		TCMT16T304		TCMT220404		SCMT120404
	(kg)Weight		0.68KG						
CODE NO.			3320-250	3320-251	3320-252	3320-253	3320-254	3320-255	



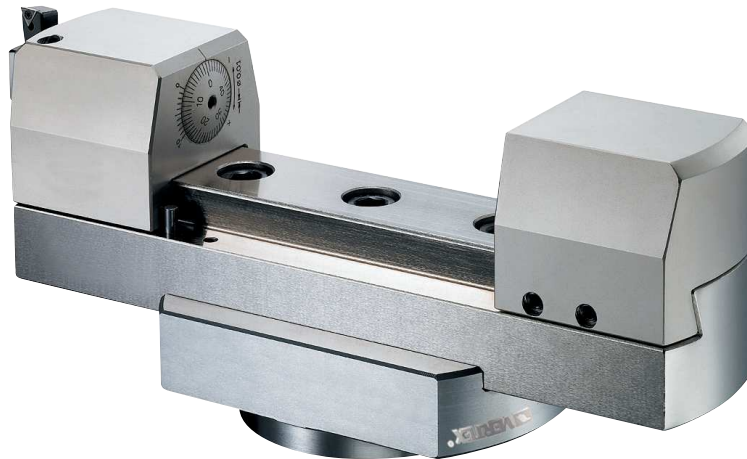
Large Diameter Finish Boring Head

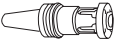




New Modular Style For Diameter Over 200mm

Boring diameter from $\varnothing 200$ - $\varnothing 1250$ mm



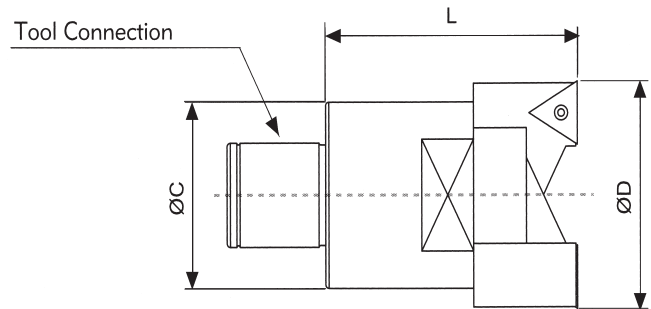
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Boring Head Type	ORDER NO.		FBH200	FBH300	FBH400	FBH500	FBH600	FBH900
	Length		130	130	130	130	150	150
	(kgs) Total Weight Steel/Alloy		9.4	11.4	13.4	15.4	17.4	22.1
	D(mm) Boring Diameter		200-310	300-410	400-510	500-610	600-950	900-1250
Module	Taper Shank		BT50-BST / NT50-BST BT50-BST / NT50-BST Series				BT50-FMA-47.625	
	Flange (kg)Weight Steel/Alloy		BR200 2.7 kg				BR600	BR900
	Extension Slide		RST200	RST300	RST400	RST500	RST300 x2pcs	RST400 x2pcs
	(kgs)Weight		3.4kg	5.4kg	7.4kg	9.4kg	11.4kg	14.8kg
	Balance Weight (kg)Weight		RS200 1.6 kg					
	Finish Head (kgs)Weight		CB200 1.6kg					
	Applicable Insert		TP08/M2.2/T7, TP09/M2.5/T8, TC11/M2.5/T8					
	CODE NO.		3320-260	3320-261	3320-262	3320-263	3320-264	3320-265



Indexable Twin-bit Rough Boring Head RBH


VERTEX®
VMH-SYSTEM
Boring diameter from $\varnothing 25$ - $\varnothing 350$ mm


-C ◆
 ● INSERT STYLE -T ▲
 -S ■

	ORDER NO.	Tool connection	D(mm) Boring Range		L (mm)	C (mm)	Insert	Weight (g)	CODE NO.
	RBH25-33-C	VBK2	25	33	45	24	CCMT060204	0.15	3320-270
	RBH32-42-C	VBK3	32	42	55	31	CCMT060204	0.3	3320-271
	RBH32-42-T						TCMT110204		3320-272
	RBH40-55-C	VBK4	40	55	65	39	CCMT09T304	0.5	3320-273
	RBH40-55-T						TCMT16T304		3320-274
	RBH40-55-S						SCMT09T304		3320-275
	RBH52-70-C	VBK5	52	70	75	50	CCMT09T304	1	3320-276
	RBH52-70-T						TCMT16T304		3320-277
	RBH52-70-S						SCMT09T304		3320-278
	RBH68-92-C	VBK6	68	92	85	64	CCMT120408	2	3320-279
	RBH68-92-T						TCMT16T304		3320-280
	RBH68-92-S						SCMT120404		3320-281
	RBH90-122-C	VBK6	90	122	100	80	CCMT120408	2.9	3320-282
	RBH90-122-T						TCMT220408		3320-283
	RBH90-122-S						SCMT120404		3320-284
	RBH120-164-C	BST	120	164	95	100	CCMT120408	3.8	3320-285
	RBH120-164-T						TCMT220408		3320-286
	RBH120-164-S						SCMT120404		3320-287
	RBH160-204-C		160	204	95	130	CCMT120408	4.8	3320-288
	RBH160-204-T						TCMT220408		3320-289
	RBH160-204-S						SCMT120404		3320-290
	RBH200-300-C	BST Series	200	300	95	170	CCMT120408	6.5	3320-291A
	RBH200-300-T						TCMT220408		3320-292A
	RBH200-300-S						SCMT120404		3320-293A
	RBH300-400-C		300	400	95	260	CCMT120408	10	3320-297A
	RBH300-400-T						TCMT220408		3320-298A
	RBH300-400-S						SCMT120404		3320-299A

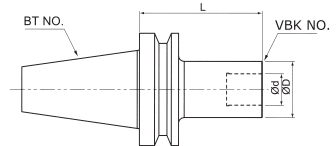
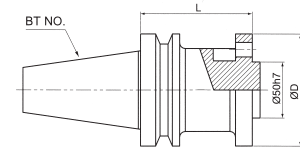
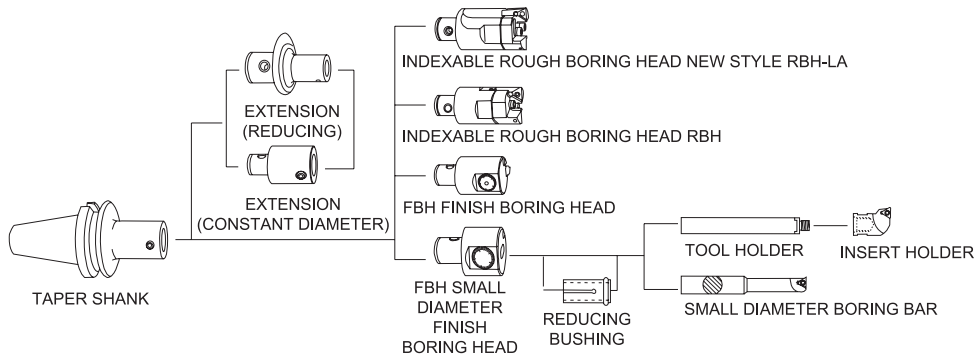
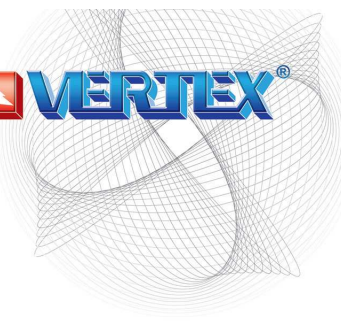


Taper Shank For Boring Heads Series BST, VBK

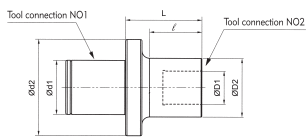


VERTEX®

Modular Boring Systems



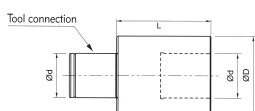
Extension (Reduced)



ORDER NO.	d1	d2	D1	D2	L	ℓ	Applicable Boring Heads	Weight (kg)	CODE NO.
VBK2-1-36L	14	24	11	19	36	30	FBH20	0.1	3320-301
VBK3-1-41L	18	31			41	30	FBH20	0.15	3320-302
VBK3-2-37L			14	24	37	25	RBH25 ; FBH25	0.15	3320-303
VBK4-1-58L	22	39	11	19	58	40	FBH20	0.3	3320-304
VBK4-2-50L			14	24	50	36	RBH25 ; FBH25	0.3	3320-305
VBK4-3-50L			18	31	50	37	RBH32 ; FBH32	0.35	3320-306
VBK5-1-60L	28	50	11	19	60	40	FBH20	0.45	3320-307
VBK5-2-54L			14	24	54	35	RBH25 ; FBH25	0.45	3320-308
VBK5-2-74L					74	55	RBH25 ; FBH25	0.5	3320-309
VBK5-3-47L			18	31	47	29	RBH32 ; FBH32	0.5	3320-310
VBK5-3-72L					72	54	RBH32 ; FBH32	0.6	3320-311
VBK5-4-42L			22	39	42	25	RBH40 ; FBH40	0.5	3320-312
VBK5-4-67L					67	50	RBH40 ; FBH40	0.7	3320-313
VBK6-1-70L	36	64	11	19	70	40	FBH20	0.9	3320-314
VBK6-2-63L			14	24	63	45	RBH25 ; FBH25	0.7	3320-315
VBK6-2-93L					93	75	RBH25 ; FBH25	0.8	3320-316
VBK6-3-56L			18	31	56	39	RBH32 ; FBH32	0.75	3320-317
VBK6-3-96L					96	79	RBH32 ; FBH32	0.95	3320-318
VBK6-4-51L			22	39	51	35	RBH40 ; FBH40	0.85	3320-319
VBK6-4-101L					101	85	RBH40 ; FBH40	1.3	3320-320
VBK6-5-41L			28	52	41	25	RBH52 ; FBH52	0.85	3320-321
VBK6-5-91L					91	75	RBH52 ; FBH52	1.45	3320-322



Extension (Constant Diameter)



ORDER NO.	d	D	L	Applicable Boring Heads	Weight (kg)	CODE NO.
VBK1-1-30L	11	19	30	FBH20	0.07	3320-323
VBK2-2-30L	14	24	30	RBH25 ; FBH25	0.1	3320-324
VBK3-3-30L	18	31	30	RBH32 ; FBH32	0.15	3320-325
VBK4-4-45L	22	39	45	RBH40 ; FBH40 ; CBI4	0.4	3320-326
VBK5-5-60L	28	50	60	RBH52 ; FBH52 ; CBI5	0.8	3320-327
VBK6-6-60L	36	64	60	RBH68/RBH90 ; FBH68, 100, 150 ; CBI6	1.4	3320-328

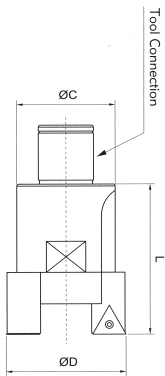
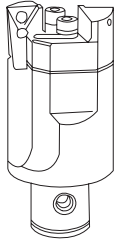


Indexable Twin-bit Rough Boring Head RBH-LA



VERTEX

Boring range from $\varnothing 25\text{mm}$ to $\varnothing 1250\text{mm}$;
a variety of tool holders and boring heads are for your selection.

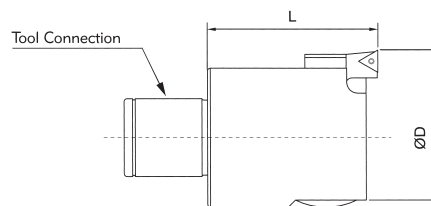


ORDER NO.	Tool connection	D(mm) Boring Range	L (mm)	C (mm)	Insert	Weight (g)	CODE NO.
RBH25-35LA-C	VBK2	25~35	50	24	CCMT060204	0.15	3320-340
RBH32-45LA-C	VBK3	32~45	60	31	CCMT060204	0.3	3320-341
RBH32-45LA-T					TCMT110204		3320-342
RBH40-55LA-C	VBK4	40~55	74	39	CCMT09T304	0.6	3320-343
RBH40-55LA-T					TCMT16T304		3320-344
RBH40-55LA-S					SCMT09T304		3320-345
RBH52-75LA-C	VBK5	52~75	80	50	CCMT09T304	1	3320-346
RBH52-75LA-T					TCMT16T304		3320-347
RBH52-75LA-S					SCMT09T304		3320-348
RBH68-100LA-C	VBK6	68~100	90	66	CCMT120408	2.5	3320-349
RBH68-100LA-T					TCMT16T304		3320-350
RBH68-100LA-S					SCMT120404		3320-351
RBH90-130LA-C	VBK6	90~130	100	88	CCMT120408	3.1	3320-352
RBH90-130LA-T					TCMT16T304		3320-353
RBH90-130LA-S					SCMT120404		3320-354
RBH120-164LA-C	BST	120~164	95	100	CCMT120408	3.8	3320-355
RBH120-164LA-T					TCMT220408		3320-356
RBH120-164LA-S					SCMT120404		3320-357
RBH160-204LA-C	BST	160~204	130	130	CCMT120408	4.8	3320-358
RBH160-204LA-T					TCMT220408		3320-359
RBH160-204LA-S					SCMT120404		3320-360
RBH200-310LA	BST Series	200~310	130	180	Optional Inserts CCMT120408 TCMT16T304 TCMT220408 SCMT120404	9.5	3320-361
RBH300-410LA		300~410		280		11.5	3320-362
RBH400-510LA		400~510		380		13.5	3320-363
RBH500-610LA		500~610		480		15.5	3320-364
RBH600-950LA	FMA-47.625	600~950	150	580		33	3320-365
RBH900-1250LA		900~1250		680		43	3320-366



FBH Finish Boring Head

Boring diameter from $\varnothing 20\text{mm}$ to $\varnothing 1250\text{mm}$



Ordering Example

FBH 52-75 — VBK5
Head Type Boring Diameter Tool Connection

FEATURES:

- FBH finish boring head is suitable for finish boring with working ranges from $\varnothing 20\text{mm}$ to $\varnothing 1250\text{mm}$ on diameter.
- The dial has been graduated into 50 divisions, each of which is 0.01mm on diameter. Available is a sub-dial for finer adjustment.
- High precision internal lead screw with inner lubrication is free from the effects of chip, featuring high durability.
- Coolant nozzle easily cools the insert and prolongs insert's working life.
- Cartridge unit is housed in a square structure with two face support, proving high stability and rigidity.

ORDER NO.	Tool Connection	ØD Boring Range	length	Weight (kg)	Insert Clamping Screw	CODE NO.
FBH20	VBK1	20-26	35	0.1	TB06/M2/T6 TP08/M2.2/T7 TC09/M2.2/T7	3320-370
FBH25	VBK2	25-33	40	0.2		3320-371
FBH32	VBK3	32-42		0.3		3320-372
FBH40	VBK4	40-55	50	0.5		3320-373
FBH52	VBK5	52-75	60	1	TP08/M2.2/T7 TP09/M2.5/T8 TC11/M2.5/T8	3320-374
FBH68	VBK6	68-102	70	2		3320-375
FBH100	VBK6	100-152		2.9		3320-376
FBH150	VBK6	150-202		4.2		3320-377
FBH200S	BST Series	200-310	130	9.7		3320-378
FBH300S		300-410		11.7		3320-379
FBH400S		400-510		13.7		3320-380
FBH500S		500-610		15.7		3320-381
FBH600S	FMA-47.625	600-900	150	33		3320-382
FBH900S		900-1250		43		3320-383



FBH Finish Boring Head

Boring diameter from Ø3 - Ø40mm



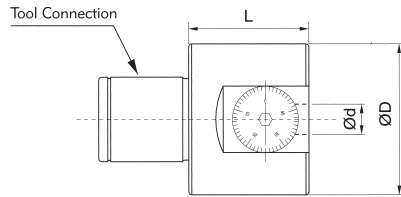
VERTEX®



BORING CAPACITY
CBI4 Ø8 - Ø20 m/m
CBI5 Ø12 - Ø40 m/m
CBI6 Ø8 - Ø40/m/m

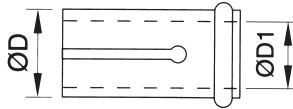
FEATURES:

- Available are three different styles enabling small diameter boring from Ø8mm to Ø40mm. Boring range can be within Ø3mm to Ø10mm if small diameter solid carbide boring bar has been employed.
- The dial has been graduated into 50 divisions, each of which is 0.01mm on diameter. Available is a subdial for finer adjustment.
- High precision internal lead screw with inner lubrication is free from the effects of chip, featuring high durability.
- Cartridge unit is housed in a square structure with two face support, proving high stability and rigidity.



ORDER NO.	Tool Connection	ØD Internal Diameter	ØD External Dimeter	length	mm feed	Weight (kg)	CODE NO.
Boring Head Type							
CBI4	VBK4	10	39	32	0-2	0.4	3320-390
CBI5	VBK5	12	50	40	0-3.5	0.8	3320-391
CBI6	VBK6	16	64	50	0-5	1.4	3320-392

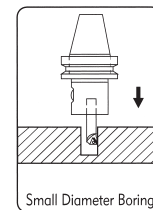
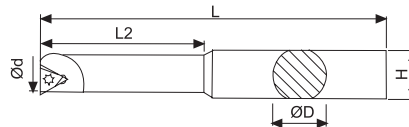
BORING BAR SLEEVE FOR CBI6



ORDER NO.	D mm	D1 mm	Applicable Carbide Tool Holder	CODE NO.
EC1608	16	8	ST08-W5-...,HC08	3320-393
EC1610	16	10	ST10-W6-...,HC10	3320-394
EC1612	16	12	ST12-W6-...,HC12	3320-395



Small Diameter Boring Head CBI4



FOR CBI4 BORING CAPACITY FROM Ø8 - Ø20MM

ORDER NO.	ØD mm	Ød mm	L mm	L2 mm	H mm	Insert	Clamp Screw	Wrench	CODE NO.
BJ1008-32	10	8	64	32	9	TBGT060104 KYOCERA	M2	T6	3320-400
BJ1010-40		10	72	40					3320-401
BJ1012-45		12	77	27		TPGB090204 KYOCERA	M2.5	T8	3320-402
BJ1016-45		16	77	27					3320-403
BJ1020-45		20	77	27		TPGB090204 KYOCERA	M2.5	T8	3320-404
※BJ10-5PCS/SET	BJ1008-32 BJ1010-40 BJ1012-45 BJ1016-45 BJ1020-45								3320-405

FOR CBI6 BORING CAPACITY FROM Ø8 - Ø40MM

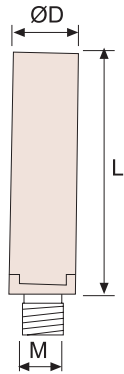
ORDER NO.	ØD mm	Ød mm	L mm	L2 mm	H mm	Insert	Clamp Screw	Wrench	CODE NO.
BJ1608-32	16	8	74	32	15	TBGT060104 KYOCERA	M2	T6	3320-406
BJ1610-40		10	75	40					3320-407
BJ1612-53		12	85	53		TPGB090204 KYOCERA	M2.5	T8	3320-408
BJ1616-68		16	100	68					3320-409
BJ1620-83		20	115	83		TPGB090204 KYOCERA	M2.5	T8	3320-410
BJ1625-90		25	122	90					3320-411
BJ1630-90		30	122	90					3320-412
BJ1640-90		40	122	90					3320-413
※BJ16-8PCS/SET	BJ1608-32 BJ1610-40 BJ1612-53 BJ1616-68 BJ1620-83 BJ1625-90 BJ1630-90 BJ1640-90								3320-414



Carbide Tool Holder

Small Diameter Modular Boring Bar

Boring diameter from
Ø8 - Ø16mm

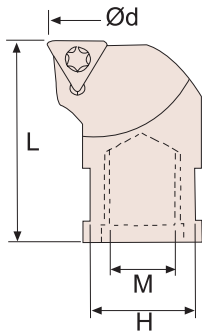


ORDER NO.	L mm	D mm	M mm	Applicable Insert Holder	Applicable Bushing	CODE NO.
ST08-W5-100	100	8	M5	BE09A, BE10.5A	EC1608	3320-420
ST10-W6-110	110	10	M6	BE12A	EC1610	3320-421
ST12-W6-120	120	12		BE14A, BE16A	EC1612	3320-424
ST16-W10-160	160	16	M10	BE18A, BE20A, BE22A, BE24A BE26A, BE28A, BE30A, BE32A BE34A, BE36A, BE38A, BE40A	---	3320-426



Insert Holder For Carbide Tool Holder

Boring diameter from Ø9 - Ø40mm



ORDER NO.	d(mm)	H(mm)	L(mm)	M(mm)	Insert	Clamping Screw	Wrench	CODE NO.
BE09A	9	7	18	M5	TPGT080204L SUMITOMO	M2.2	TF7	3320-430
BE10.5A	10.5	7	23	M6				3320-431
BE12A	12	8						3320-432
BE14A	14	10						3320-433
BE16A	16	10						3320-434
BE18A	18	14	27	M10				3320-435
BE20A	20	14						3320-436
BE22A	22	14						3320-437
BE24A	24	14						3320-438
BE26A	26	14						3320-439
BE28A	28	14						3320-440
BE30A	30	14						3320-441
BE32A	32	14						3320-442
BE34A	34	14						3320-443
BE36A	36	14						3320-444
BE38A	38	14						3320-445
BE40A	40	14						3320-446



RBH Indexable Twin-bit Rough Boring Head

Boring diameter from Ø25 - Ø350mm



- The head is suitable for single bit boring, twin-bit boring and step boring with working diameter from Ø25mm to Ø350mm on diameter.
- New cartridge style with built-up rib. The pressure imposed on both cartridges counteracts producing highest rigidity and cutting efficiency, most suitable for a variety of borings.
- Boring head can be easily adjusted to different boring needs for machining on demand. Boring depth can be extended by tool connection.
- Clear side division provides a convenient adjustment without using a tool pre-setter.
- Most suitable for boring on various machine centers or boring mills. Universal design accepts inserts of any brands, which will reduce tool grinding and greatly improve boring performance.
- Patented step boring design; suitable for both level boring and step boring.



Indexable Twin-bit Rough Boring Head RBH-LA

Boring diameter from Ø25 - Ø200mm



- Thickened cartridge with higher rigidity.
- Coolant nozzle easily cools the insert elongating its working life.
- Completed with chip pocket, improving chip flow of deep boring.
- Clamp plate solidifies cartridges and head, upgrading cutting rigidity.
- Patented step boring design; suitable for both level boring and step boring.



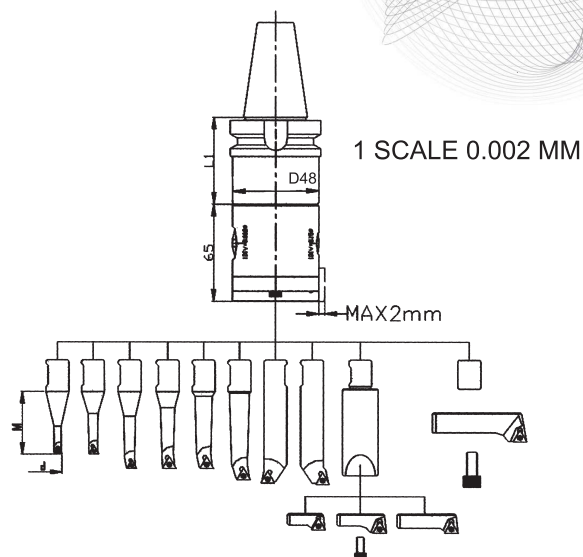
Large Diameter Modular Rough Boring Head With Diameter Over Ø200mm

Boring diameter from Ø200 - Ø810mm



- This type is suitable for large diameter boring with ranges from 200mm to 810mm.
- The structure includes common flange and extension slide for both rough and finish boring heads. Adjustment range is within 110mm on diameter.
- Options of various inserts for rough boring of different materials and boring styles.
- Available is the horizontal slide made of Aluminum alloy to reduce total weight.
- Options of external boring kit with boring range from Ø20mm to Ø300mm.

NEW



- Processing range Ød 6-90mm.
- This slim set allows customer to process boring work in the narrow space with high precision.
- Precisely ground and hardened shank integrating with boring head for routing and smooth operation.
- Please keep boring head clean and lubricate constantly.

SET TYPE

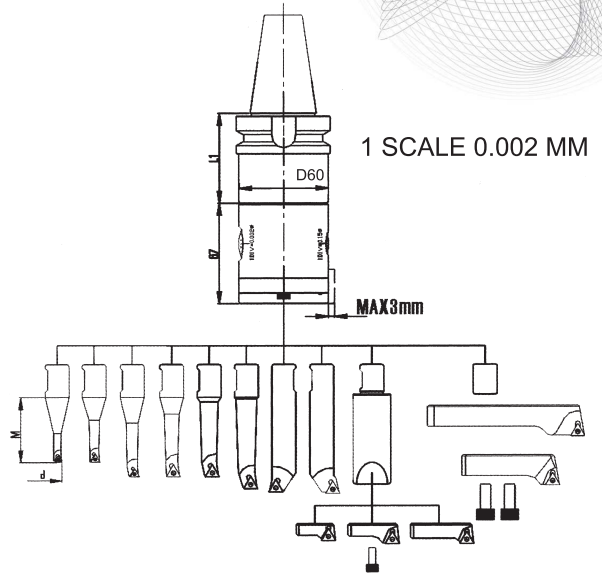
ORDER NO.	Boring Range Ø	Shank	L1	Head Dia. ØD	PCS/SET	CODE NO.
VBHD-BT-30	6-90	BT30-VCK4-45	45	48	14 PCS/SET	3320-450
VBHD-BT-40		BT40-VCK4-60	60			3320-451
VBHD-BT-50		BT50-VCK4-75	75			3320-452
VBHD-SK-40		SK40-VCK4-65	65			3320-453
VBHD-SK-50		SK50-VCK4-75	75			3320-454
VBHD-NT-40		NT40-40-VCK4-60	60			3320-455
VBHD-NT-50		NT50-50-VCK4-60	60			3320-456
VBHD-HSK63A		HSK63A-VCK4-75	75			3320-457
VBHD-HSK100A		HSK100A-VCK4-75	75			3320-458

ACCESSORIES: BORING BAR SIZE FOR SET TYPE

Boring Bar	Range d	Depth m	Insert	Screw	Wrench	Feed mm/REV.
BR-1606-20	6-9	20	WBGT060102L	TS2	T6	0.05-0.1
BR-1608-28	8-11	28	TBGT060102L			0.05-0.1
BR-1610-36	10-13	36	TBGT060104L			0.07-0.15
BR-1612-42	12-15	42	TPGT090202L	TS25	T8	0.05-0.1
BR-1614-50	14-17	50				
BR-1616-60	16-20	60				
BR-1620-63	20-24	63	TPGT090204L			0.07-0.15
BR-1624-64	24-28	64				
BM5		60+SRTP2838/SRTP3652/SRTP4470		M5 X15 CAP	4	0.05-0.1
SRTP2838	28-38	+10	TPGT090202L	TS25	T8	
SRTP3652	36-52	+12				
SRTP4470	44-70	+12	TPGT090204L			0.07-0.15
BM8				M5 X 15 CAP	6	
SRTP58-90	58-90	+20	TPGT090204L	TS25	T8	



Precision Finish Boring Head Sets


VERTEX®
NEW


- Processing range Ød 6-150mm.
- This slim set allows customer to process boring work in the narrow space with high precision.
- Please keep boring head clean and lubricate constantly.
- Precisely ground and hardened shank integrating with boring head for routing and smooth operation.

SET TYPE

ORDER NO.	Boring Range Ø	Shank	L1	Head Dia. ØD	PCS/SET	CODE NO.
VBHE-BT-40	6-150	BT40-VCK5-60	60	60	15 PCS/SET	3320-460
VBHE-BT-50		BT50-VCK5-75	75			3320-461
VBHE-SK-40		SK40-VCK5-65	65			3320-462
VBHE-SK-50		SK50-VCK5-75	75			3320-463
VBHE-NT-40		NT40-40-VCK5-60	60			3320-464
VBHE-NT-50		NT50-50-VCK5-75	75			3320-465
VBHE-HSK63A		HSK63A-VCK5-75	75			3320-466
VBHE-HSK100A		HSK100A-VCK5-75	75			3320-467

ACCESSORIES: BORING BAR SIZE FOR SET TYPE

Boring Bar	Range d	Depth m	Insert	Screw	Wrench	Feed mm/REV.
BR-1606-20	6-9	20	WBGT060102L	TS2	T6	0.05-0.1
BR-1608-28	8-11	28	TBGT060102L			0.05-0.1
BR-1610-36	10-13	36	TBGT060104L			0.07-0.15
BR-1612-42	12-15	42	TPGT090202L	TS25	T8	0.05-0.1
BR-1614-50	14-17	50				
BR-1616-60	16-20	60				
BR-1620-63	20-24	63	TPGT090204L			0.07-0.15
BR-1624-64	24-28	64				
BM5		60+SRTP2838/SRTP3652/SRTP4470		M5 X15 CAP	4	0.05-0.1
SRTP2838	28-38	+10	TPGT090202L	TS25	T8	
SRTP3652	36-52	+12				
SRTP4470	44-70	+12	TPGT090204L			0.07-0.15
BM8				M5 X 15 CAP	6	
SRTP70100	70-110	+20	TPGT090202L	TS25	T8	0.05-0.1
SRTP110150	110-150	+20	TPGT090204L			0.07-0.15



High Precision Boring Head Set



VERTEX[®]

NEW

**1 SCALE 0.005mm
BORING CAPACITY Ø8-Ø46**



VBH 620

- Good for high speed, high precision boring work.
 - Made of tool steel, high rigidity, no deformation.
 - Each dividing scale is 0.005 mm, total stroke: 6mm.
 - Can choose any taper (BT40, BT50, SK40, SK50) shank.
 - Include 8 boring bars, range Ø8 ~ Ø46 mm.
- Boring bar size = Ø16 x 8 pcs
 - Insert locking screw 8 x 3 = 24 pcs
 - Wrench x 6 pcs
 - 4 mm T wrench x 1 pcs

SET TYPE

ORDER NO.	SHANK TYPE	DRAWBAR	THREAD	Weight (kgs)	CODE NO.
		S.A.E	METRIC		
VBH620-NT40	NT-40	5/8"-11W	M16X2.0P	6.5	3320-480
VBH620-NT50	NT-50	1"-8W	M24X3.0P	7.8	3320-481
VBH620-BT40	BT-40		M16X2.0P	6.5	3320-482
VBH620-BT50	BT-50		M24X3.0P	8	3320-483
VBH620-SK40	SK-40		M16X2.0P	6.5	3320-484
VBH620-SK50	SK-50		M24X3.0P	7.8	3320-485

BORING BAR FOR BORING HEAD

BORING BAR	RANGE d	DEPTH m	SHANK L	INSERT	SCREW	WRENCH
1608-32	8-11	32	80	TBGT060102L	SB-1STR-M2	T6
1610-40	10-13	40	87			
1612-53	12-15	53	98	TPGH090204L	SB-2STR-M2.5	T8
1616-68	16-21	68	110			
1620-83	20-26	83	124	TPGH110304L	SB-3STR-M3	T10
1625-90	25-31	90	128			
1630-90	30-36	90	128			
1640-90	40-46	90	128			



High Precision Boring Head Set



VERTEX

NEW

1 SCALE 0.005mm
BORING CAPACITY Ø8-Ø280



VBH 2084

- Good for high speed, high precision boring work.
- Made of tool steel, high rigidity, no deformation.
- Each dividing scale is 0.005 mm, total stroke: 27mm.
- Can choose any taper (BT40, BT50, SK40, SK50) shank.
- Include 8 boring bars, range Ø8 ~ Ø280 mm.
- Boring bar size = Ø20 x 8 pcs
- Insert locking screw 8 x 3 = 24 pcs
- Wrench x 6 pcs
- Hexa 6 wrench x 1 pcs

SET TYPE

ORDER NO.	SHANK TYPE	DRAWBAR	THREAD	Weight (kgs)	CODE NO.
		S.A.E	METRIC		
VBH2084-R8	R-8	7/16"-20UNF	n/a	6.6	3320-491
VBH2084-NT30	NT-30	1/2"-12W	M12X1.75P	6.6	3320-492
VBH2084-NT40	NT-40	5/8"-11W	M16X2.0P	7	3320-493
VBH2084-NT50	NT-50	1"-8W	M24X3.0P	9	3320-494
VBH2084-BT40	BT-40		M16X2.0P	8	3320-495
VBH2084-BT50	BT-50		M24X3.0P	10.4	3320-496
VBH2084-SK40	SK-40		M16X2.0P	8	3320-497
VBH2084-MT3	MT-3		M12X1.5P	6.6	3320-498
VBH2084-MT4	MT-4		M16X2.0P	7	3320-499
VBH2084-MT5	MT-5		M24X3.0P	8	3320-500

BORING BAR FOR BORING HEAD

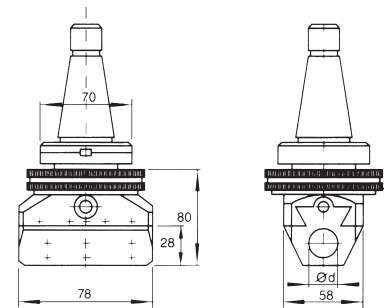
BORING BAR	RANGE d	DEPTH m	SHANK L	INSERT	SCREW	WRENCH
2008-32	8-11	32	75	TBGT060102L	SB-1STR-M2	T6
2010-40	10-13	40	75			
2012-53	12-17	53	85	TPGH090204L	SB-2STR-M2.5	T8
2016-68	16-21	68	100			
2020-83	20-130	83	115	TPGH110304L	SB-3STR-M3	T10
2025-95	25-135	95	128			
2030-115	30-140	115	147			
2020-L	120-280	85+BT	98			



Universal Boring And Facing Master Head


VERTEX®
BORING CAPACITY Ø5-Ø250
1 SCALE 0.01mm


ORDER NO.	SHANK TYPE	DRAWBAR THREAD		Weight (kg)	CODE NO.
		S.A.E	METRIC		
VBHU-202	MT-3	1/2"-12W	M12X1.5P	6/6.1	3401-001
VBHU-203	MT-4	5/8"-11W	M16X2.0P	6.3/6.3	3401-002
VBHU-204	MT-5	1"-8W	M24X3.0P	7.1/7	3401-003
VBHU-205	R-8	7/16"-20UNF	n/a	6.2/	3401-004
VBHU-206	NT-30	1/2"-12W	M12X1.75P	6/6	3401-005
VBHU-207	NT-40	5/8"-11W	M16X2.0P	6.3/6.2	3401-006
VBHU-208	NT-50	1"-8W	M24X3.0P	8.9/8.5	3401-007
VBHU-209	BT-40		M16X2.0P	/6.9	3401-008
VBHU-210	C-25			4.5	3401-009
VBHU-211	SK-40		M16X2.0P	5.6	3401-010
VBHU-212	SK-50		M24X3.0P	8.3	3401-011
VBHU-213	BT-50		M24X3.0P	9.7/9.7	3401-012

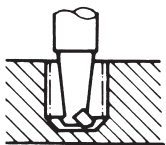


SPECIFICATION

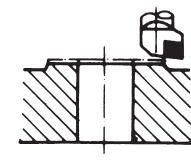
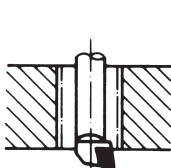
Unit:mm

ACTUAL SIZE	OVERING BAR HOLE SIZE	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET
78	100	18	23	18	15

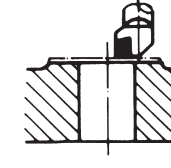
It is construction with precision parts, freedom of selection feeding quantity, auto feed and stop. Processing range from 5mm to 250mm.



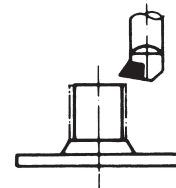
Boring with several different bits from 5Ø - 250mm



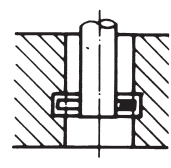
From inside outward



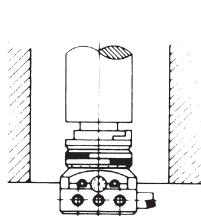
From inside inward



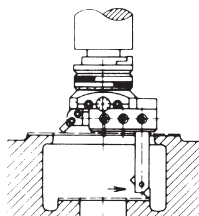
Outside turning



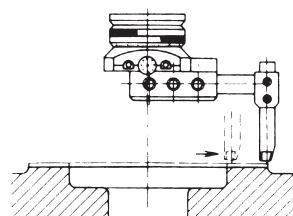
Recessing



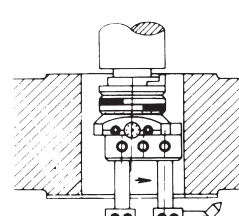
Because of the small construction of the facing and boring heads deep bores can be made. In this case the boring bit is fixed directly in the side.



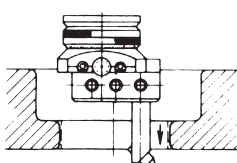
Facing in two areas with one boringbar and boringbar holder



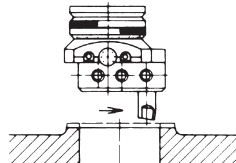
Facing of large Ø with long boringbar holden reinforced by rings and draw in screw



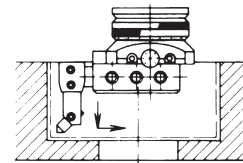
Facing of the reverse side by using boringbar holders contained in attachment.



Boring with long boringbar

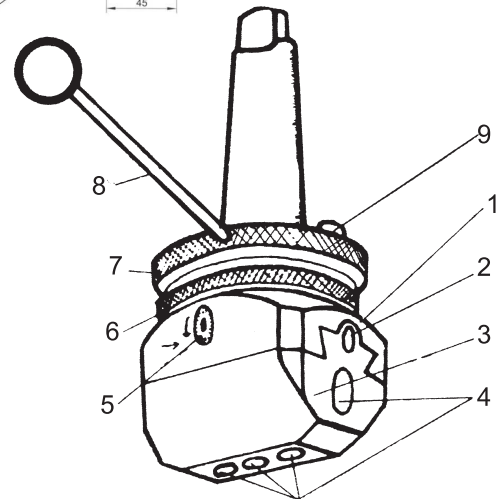
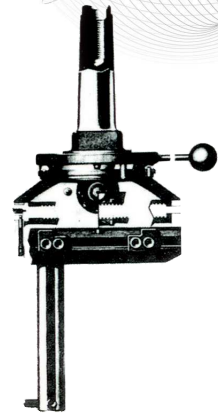
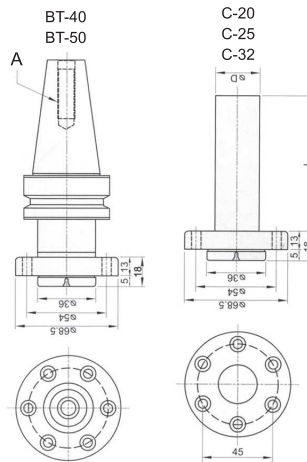
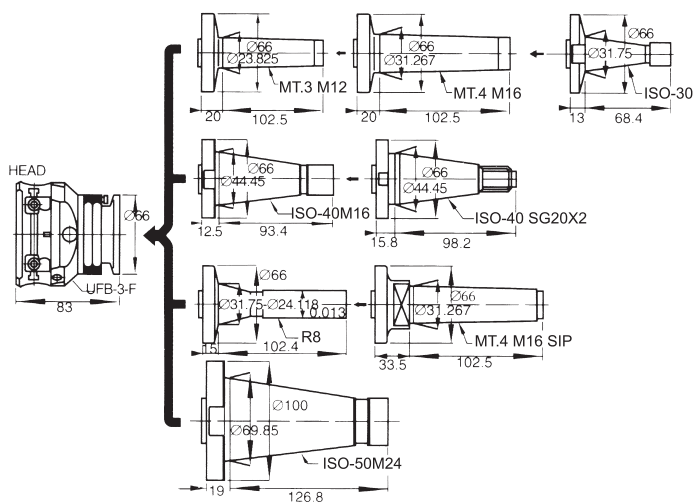


Facing with bit fixed directly in slide



Boring and facing with short boringbar holder and a boringbar

SHANK



Main part of the universal boring heads is the body(1), in which the tool slide (3) moves on dovetail guideways. The tool slide is provided with holes for accommodation of tools and tool holders(4). In boring holes or turning external cylindrical surfaces, the tool is adjusted with the aid of the graduated dial for fine setting of tool slide(5), one division of which means a change in diameter of bored hole by .0005".

On the types rapid adjustment of the tool slide(3) can be produced by rotating the graduated dial for quick adjustment of the tool slide(2).

During recessing, turning of front or rear facings or similar jobs calling for automatic transverse feed movement to the tool slide, the preselected feed movement to the tool slide is engaged with the aid of the engagement ring (6). After setting of tool, the automatic transverse feed movement to the tool slide is started by braking of the brake ring(7), by means of the handle(8).

The clutch(9) provides for tripping of the automatic feed movement when cutting resistance increases or when the trip dog is approached.

Mechanism of the boring heads has a lubrication circuit delivering oil from two lubricators to all friction surfaces.

All parts are hardened and working surfaces are ground.

SHANK FOR VBHU-		
MT-3	MT-4	MT-5
NT-30	NT-40	NT-50
R-8		
C-20	C25	C-32
	BT-40	BT-50

Stop Rod
BP-17

Square Bit (HSS)
BP-18

metric	D
BP7	10ø
BP8	12ø

	A
BP14	4
BP15	5
BP16	6

Metric	ØxL
BP-9	18Øx90
BP-10	10Øx80
BP-11	10Øx70
BP-12	10Øx60

metric	L
BP-3	120

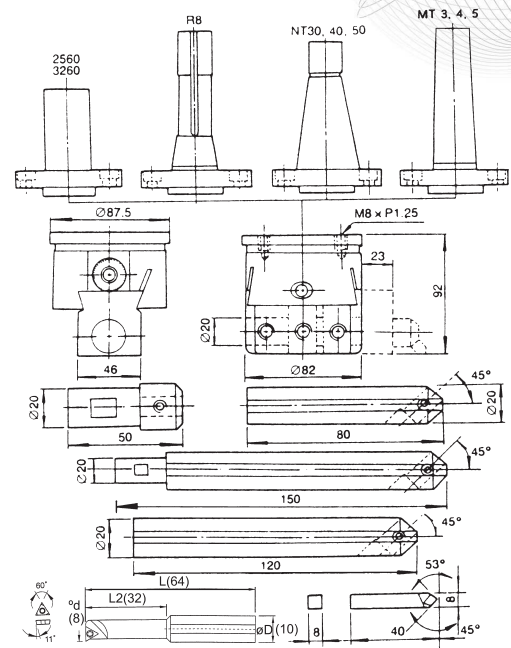
metric	L
BP-1	90
BP-2	120



STANDARD TYPE



INSERT NO.
TBGT060102L-W-T1200A FOR STEEL
TBGT060102L-W-G11 FOR CASTING
"SUMITOMO" BRAND



1 SCALE 0.01mm

Processing Range $\varnothing 10 \sim \varnothing 240\text{mm}$

Simple, extremely rigid construction, Finest materials and craftsmanship are employed to combine strength, flexibility and accuracy in a tool of unique design. 2 vertical boring tool holes: one centered and one offset. One cross hole for greater versatility and capacity. Dependable adjustment --- far spread graduation for closer reading. Perfectly balanced for high speed operation.

Precision ground & hardened shank are integrating with the head for routing and smoother operation.



FULL SET

ORDER NO.	SHANK TYPE	DRAWBAR THREAD		Weight (kgs)	CODE NO.
		S.A.E	METRIC		
VBH-102	MT-3		M12X1.75P	5.9	3401-101
VBH-103	MT-4		M16X2.0P	6.1	3401-102
VBH-104	MT-5		M20X3.0P	7	3401-103
VBH-105	R-8	7/16" ~20UNF		5.9	3401-104
VBH-106	NT-30	1/2"-12W or 1/2"-13W	M12X1.75P	5.8	3401-105
VBH-107	NT-40	5/8"-11W	M16X2.0P	6	3401-106
VBH-108	NT-50	1"-8W	M24X3.0P	8.9	3401-107
VBH-109	BT-40	-	M16X2.0P	7.1	3401-108
VBH-110	SK-40	-	M16X2.0P	6.8	3401-109
VBH-111	C-25	-	-	5.9	3401-110
VBH-112	BT-50		M24X3.0P		3401-111

SHANK FOR BORING HEAD

ORDER NO.	VBH-MT3	VBH-MT4	VBH-MT5	VBH-R8
WEIGHT (KG)	0.6	1.2	2.1	1
CODE NO.	3401-120	3401-121	3401-122	3401-123

ORDER NO.	VBH-NT30	VBH-NT40	VBH-NT50	VBH-BT40
WEIGHT (KG)	1.1	1.2	3.9	1.9
CODE NO.	3401-124	3401-125	3401-126	3401-127

ORDER NO.	VBH-SK40	VBH-C25	VBH-BT50	
WEIGHT (KG)	1.9	1.5	3.1	
CODE NO.	3401-128	3401-129	3401-130	



Boring Head Set C-Type



1 SCALE 0.01mm



VBHC-BC2
SET TYPE

MAX. BORING DEPTH 50mm

Here is a sturdy unit of extended boring range, capable of peeling off heavy roughing cuts as well as a tool of extreme sensitivity. The use of a wide base bar holder, resting securely on the body, eliminates the need for a separate side plate. You will note this has now become an integral part of the body.

The direct reading adjusting screw is ground after hardening and a plainly marked dial face in nonreflecting satin chrome allows easy reading and adjustments of 0.01 or less.

All Criterion Boring Heads have threaded backs for use with a variety of shanks. This model takes a 1-1/2"-18 threaded shank.

SHANK SIZE: NT-30,40,50, MT-3,4,5,R8

BORING CAPACITY Ø10~Ø110

ORDER NO.	WEIGHT (kgs)	CODE NO.
VBHC-R-8-BC-2	2	3401-150
VBHC-MT-3-BC-2	1.9	3401-151
VBHC-MT-4-BC-2	2.1	3401-152
VBHC-NT-30-BC-2	2.2	3401-153
VBHC-NT-40-BC-2	2.8	3401-154
VBHC-BT-30-BC2		3401-155
VBHC-BT-40-BC2	2.65	3401-156
VBHC-BT-50-BC2	5.65	3401-157

BORING CAPACITY Ø10~Ø220

ORDER NO.	WEIGHT (kgs)	CODE NO.
VBHC-R-8-BC-3	4.2	3401-160
VBHC-MT-3-BC-3	4	3401-161
VBHC-MT-4-BC-3	4.3	3401-162
VBHC-NT-30-BC-3	4.1	3401-163
VBHC-NT-40-BC-3	4.7	3401-164
VBHC-NT-50-BC-3	6.9	3401-165
VBHC-BT-30-BC-3		3401-166
VBHC-BT-40-BC-3	4.7	3401-167
VBHC-BT-50-BC-3	7.7	3401-168



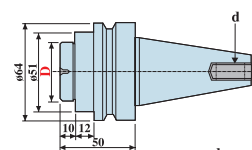
VBHC-BC3 SET TYPE



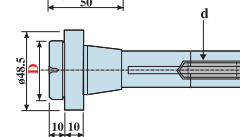
Boring Head Shank C-Type



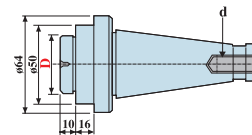
D: 1 1/2"-18UNC



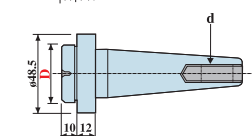
BT-40, 50



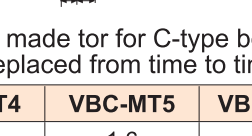
R-8



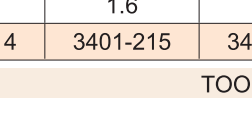
NT-30 M12x1.75P
1/2"-12UNC



NT-40 M16x2.0P
5/8"-11UNC



NT-50 M24x3.0P
1"-8UNC



MT-3 M12x1.75P
3/8"-16UNC



MT-4 M16x2.0P
5/8"-11UNC

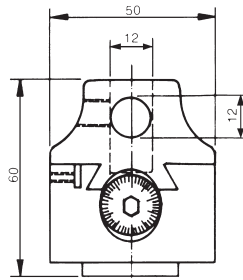
MT-5 M24x3.0P
1"-8UNC

The shanks are made for C-type boring head use. Also it can be replaced from time to time.

ORDER NO.	VBC-R8	VBC-NT30	VBC-NT40	VBC-MT3	VBC-MT4	VBC-MT5	VBC-BT40	VBC-BT50
WEIGHT (KG)	0.4	0.7	1.3	0.6	0.9	1.6	1.4	
CODE NO.	3401-210	3401-211	340-212	3401-213	3401-214	3401-215	3401-216	3401-217



C-Type Boring Head



Here is a small head that will be in constant demand in any shop.

Note the wide base bearing surface that assures maximum rigidity even when the bar holder is in an off-set position. This wide base design is a recent Criterion innovation that increases bearing surfaces by 50% over the older models.

A choice of either 3/8" or 1/2" double hole bar holder with a 1/2" cross hole is available.

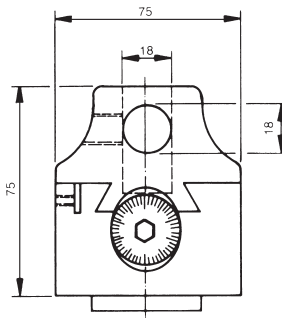
The unit has a 7/8"-20NC threaded back and also features a direct reading dial screw.

ORDER NO. VBC-2

SPECIFICATION

BORING CAPACITY Ø10-Ø100

ORDER NO.	ACTUAL SIZE	OVERALL LENGTH	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET	WEIGHT (kg)	CODE NO.
VBC-2(m)	50	62	12	15	12	15	0.8	3401-302



Here is a sturdy unit of extended boring range, capable of peeling off heavy roughing cuts as well tool of extreme sensitivity. The use of a wide-base bar-holder resting securely on the body, eliminates the need for a separate side plate. You will notice it has now become an integral part of the body.

The direct reading adjusting screw is ground after hardening and a plainly marked dial face in non-reflecting satin chrome allows easy reading and adjustments of .0005 or less.

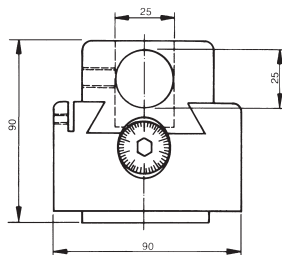
All Criterion Boring Heads have threaded backs for use with a variety of shanks. This model takes a 1-1/2"-18 threaded shank.

ORDER NO. VBC-3

SPECIFICATION

BORING CAPACITY Ø10-Ø220

ORDER NO.	ACTUAL SIZE	OVERALL LENGTH	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET	WEIGHT (kg)	CODE NO.
VBC-3(m)	75	80	18	23	18	25	2	3401-304



This is a bigger boring head which can be put on large machine to process more as you want. The radius of boring hole can reach on about Ø 400mm long by a boring bar of 160mm.

SPECIFICATION

BORING CAPACITY Ø10-Ø250

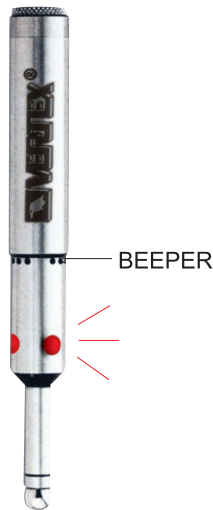
ORDER NO.	ACTUAL SIZE	OVERALL LENGTH	BORING BAR HOLE SIZE	CENTER DIST BETWEEN HOLES.	CROSS HOLE DIA	OFFSET	WEIGHT (kg)	CODE NO.
VBC-4(m)	100	90	25	32	25	25	4	3401-306



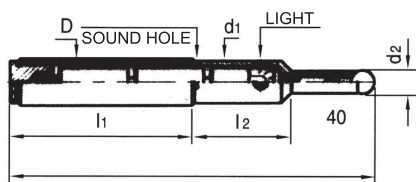
Touch Point Sensor



With beeper



- No need to rotate while measuring.
- The red light was sealed with setting red-glue; it can concentrate the light and resist water.
- The sensor beeps while the red light is on.
- The sensor will beep when the user couldn't see the reverse side or get a clear sight.
- Example. If sensor's light is working, visually you couldn't see inside of the inner hole, while probing the user can be warned by the beeper.
- When probe the deep hole, you can't see the red light, but you can hear the sound from beeper.
- Accuracy: within 0.005mm.



OPTICAL TYPE WITH BEEPER

Unit:mm

ORDER NO.	D	d1	d2	L	l1	l2	BATTERY TYPE	WEIGHT (kg)	CODE NO.
VPS-20B	Ø20	18	10	160	79	41	UM-5#(SP) x1PCS/12V	0.4	3402-001
VPS-32B	Ø32	18	10	160	79	41		0.7	3402-002



Touch Point Sensor

Optical Type



VPS-20



VPS-32

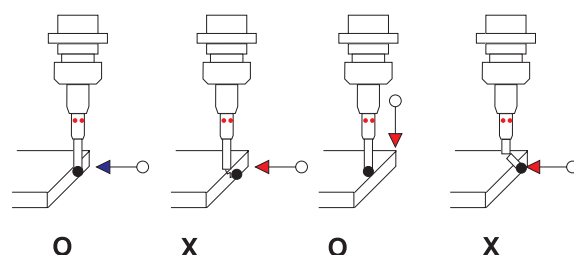
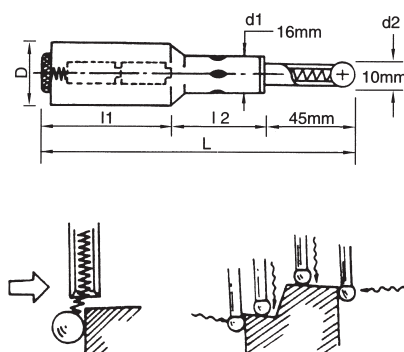
- High sensitivity position sensor.
- Red pilot can be seen clearly.
- Whole travel of red pilot is sparking, detecting also can be done during turning while spindle stops.
- Location of end surface, outer circle dia., inner circle dia. of the work-piece for processing can be detected with full effect.
- Devised with safety line excess, ball supported by spring, so even line excess, it will be separated easily from the base shown as the fig.
- The precision will reach up to micrometer while the ball returns to center position.

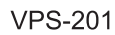
OPTICAL TYPE

Unit:mm

ORDER NO.	D	d1	d2	L	l1	l2	BATTERY TYPE	WEIGHT (kg)	CODE NO.
VPS-20	20	16	10	157	77	35	UM-5#(SP) x2P/R1./1.5V	0.4	3402-003
VPS-32	32	16	10	157	71	41		0.7	3402-004

Fig.



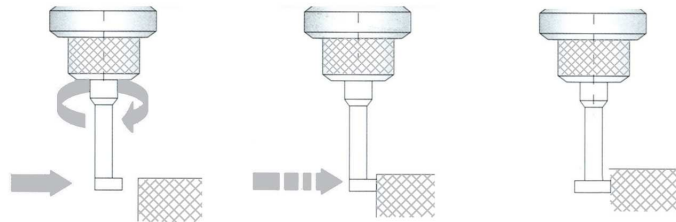
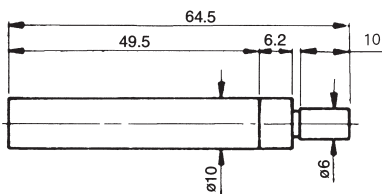


VPS-401 600 to 1,000 rpm



MECHANICAL TYPE SIMPLE TYPE

ORDER NO.	VPS-201	VPS-201C
WEIGHT (KG)	0.03	0.06
CODE NO.	3402-005	3402-007



Deluxe Type

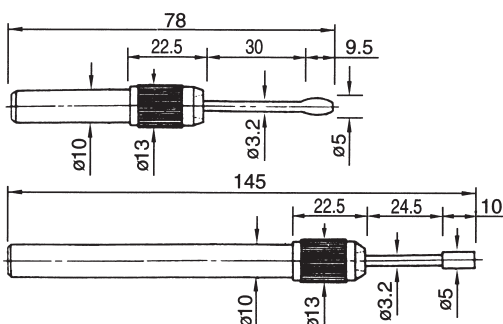


FEATURES:

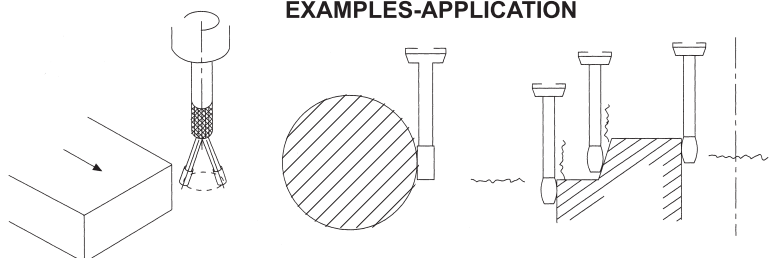
- Material: high-carbon steel.
- Accuracy: within 0.003mm
- Hardness: HRC 58° ± 1°
- R.P.M. Within 600-1000
- Suitable for milling machine.
Drill machine and boring machine.

VPS-402B(SHORT) SINGLE

ORDER NO.	VPS-401	VPS-401C
PCS/SET	2PCS/SET	2PCS/SET
WEIGHT (KG)	0.26	0.26
CODE NO.	3402-006	3402-008



EXAMPLES-APPLICATION





Touch Point Sensor



VERTEX

MECHANICAL TYPE



VPS-301

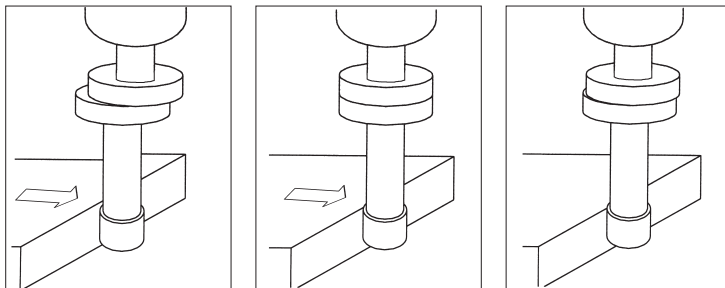
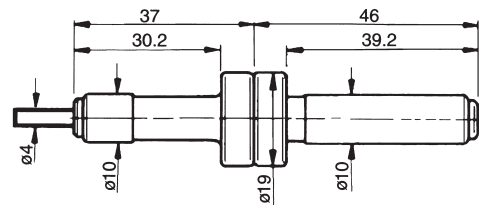
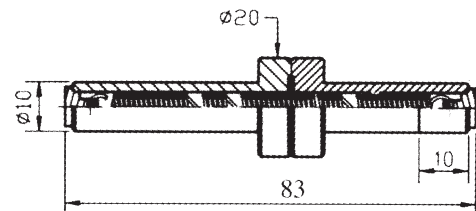


VPS-302

- Accuracy of zero point to point is within 0.003mm
- R.P.M. within 450-600.
- Max. flange can be clear your sight sense.
- MIN.(4mm) can be test mini hole for your workpiece.



CERAMIC TYPE VPS-301C



Spindle runs about 500rpm. move spindle closed to measuring surface.

When measuring probe touches workpiece, it looks in one part.

When the probe and shank are in alignment, probe will slide out of rotating center. Now, the center spindle is located 5mm away from measuring surface

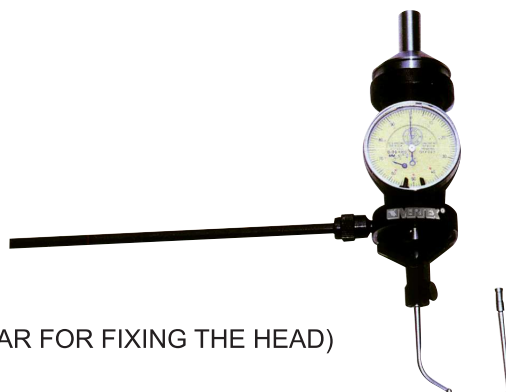
ORDER NO.	MATERIAL	HARDNESS	WEIGHT (kg)	CODE NO.
VPS-301	ALLOY STEEL	HRC 56°	0.06	3402-100
VPS-302			0.05	3402-101
VPS-301S	STAINLESS	HRC 60°	0.06	3402-102
VPS-302S			0.06	3402-103
VPS-301C	CERAMIC	HRC 60°	0.06	3402-104



Centering Indicator

ORDER NO.VCI-170 CODE NO.3402-130

- RPM Within 800.
- Use for Internal or External.
- Use for Vertical or Horizontal.
- While Spindle Rotates, With Stop bar for Fixing The Head The Centering Indicator Always faces the operator.



(WITH STOP BAR FOR FIXING THE HEAD)

Shank	ø10	m/m
Length	170	m/m
Internal	ø4~ø108	m/m
External	ø0~ø108	m/m
Min. Indicator	0.01	m/m
Indicator Range	0~6	m/m
Weight	0.8 kgs	

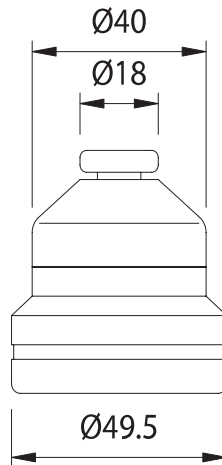


Height Presetter



VERTEX

OPTICAL TYPE



HP-50Z BATTERY
LR4476AG13
1SET/2PCS
HP-50ZM
LR44
1SET/2PCS



- Height 50mm.
- With Magnetic base.
- The red lamp will be lighted up when touched.
- Accuracy 0.005mm.
- Combined vertical and horizontal in a unit.
- Weight:0.7kgs

	STANDARD TYPE	WITH MAGNETIC BASE
ORDER NO.	HP-50Z	HP-50ZM
CODE NO.	3403-001	3403-002



Height Presetter (For Machining Center)

ORDER NO.HP-100 CODE NO.3403-010



- Locate the height presetter on a place suitable for a reference surface of work piece.
- Apply the cutter on the measuring surface and slowly lower the Z-axis. Then, cutter gets near to the measuring position.
- A distance from the reference surface to the tool tip can be measured easily and precisely so that this presetter is most suitable not only for machineing centers but for NC lathes and NC milling machines.

* Magnetic base function can be used in vertical position & horizontal position.

* HEIGHT:100mm±0.005

Height from reference surface	WEIGHT(kgs)
100mm	2.6



HP-50A

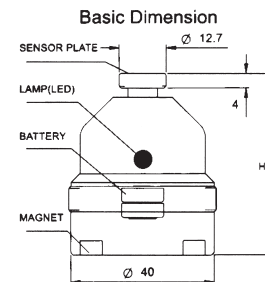


HP-50B

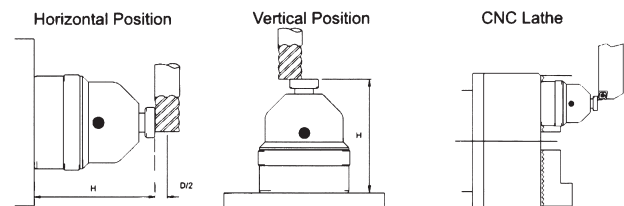
- Have the central measuring part of the zero setter presetter against a plain surface and aligned if with the outer reference surface. Turn the dial gauge for zero setting.
- Have the cutter touched against the z zero setter. Once the indicator position at zero, the distance between the tool tip to workpiece is 50mm.

ORDER NO.	H	STYLE	WEIGHT (kg)	CODE NO.
HP-50A	50mm	STANDARD TYPE	1.1	3403-020
HP-50B			1.7	3403-021
HP-50AM		WITH MAGNETIC BASE	1.2	3403-022
HP-50BM			1.7	3403-023

Electronic Tool Length Setter



Stainless Steel Base With Magnet



● HIGH ACCURACY

● EASY OPERATION

- Be sure to remove all chips and all from the sensor plate and the base of the HP-50E as well as from the workpiece and tool.
- To move the tool approaching the sensor plate slowly.
- When touching, the "LED" turns on immediately and "H" is just 50.00 mm.(or2")
- LED will not function if batteries are not set in correctly.
- Designed to be used on ferrous and non-ferrous materials.

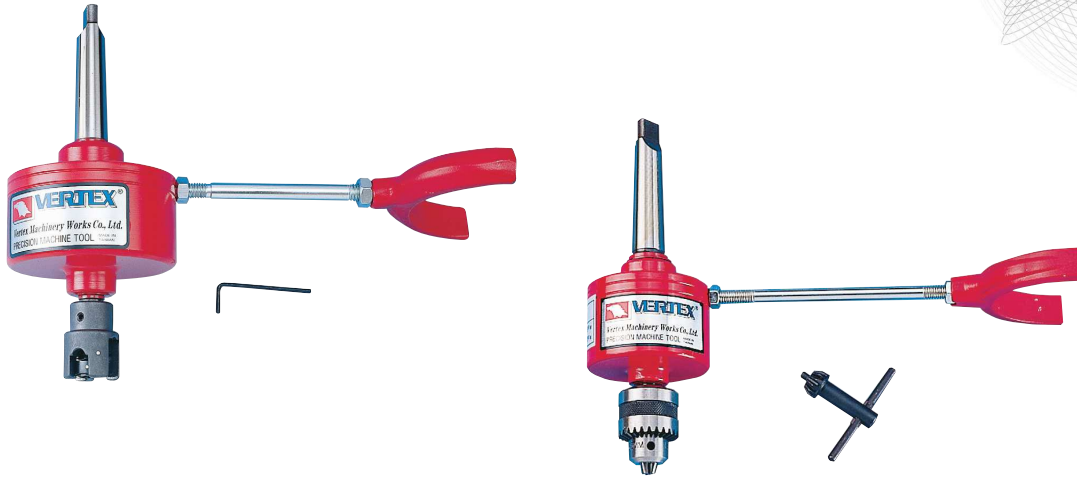
ORDER NO.	H	STYLE	WEIGHT (kg)	CODE NO.
HP-50EM	50mm	WITH MAGNETIC BASE	0.3	3403-032
HP-100EM	100mm		1.2	3403-033

Stainless Steel Base With Magnet

TOOL PRE-SETTER FOR MACHINING CENTERS.
CNC & STANDARD MILLING MACHINES AND
CNC & STANDARD LATHES



Reversible Tapping Attachment for Drilling & Milling Machine



ORDER NO.	TAPPING CAPACITY	SHANK	TO WORK WITH DRILLING MACHINE	WEIGHT (KG)	PACKING mm	SPEED	CODE NO.
K1-1/2	Ø3-8mm	1/2"	DRILLING MACHINE MUST EQUIPPED WITH DRILL CHUCK CAPACITY 13M/M	0.8	90X90X190	1 : 1	3404-001
K1-MT-2	Ø3-8mm	MT-2	DRILLING MACHINE MUST EQUIPPED WITH MT-2 HOLE	1	90X90X240	1 : 1	3404-002
K2-1/2	Ø5-10mm	1/2"	DRILLING MACHINE MUST EQUIPPED WITH DRILL CHUCK CAPACITY 13M/M	1.5	100X100X210	1 : 1	3404-003
K2-MT-2	Ø5-10mm	MT-2	DRILLING MACHINE MUST EQUIPPED WITH MT2 HOLE	1.6	100X100X260	1 : 1	3404-004
K3-MT-3	Ø6-14mm	MT-3	OTHERS LIKE MT-3 SHANK BORING HOLE DRILLING MACHINE N.T. AVAILABLE	3.1	125X125X300	1 : 1	3404-005
K4-MT-3	Ø12-25mm	MT-3	OTHERS LIKE MT-3 SHANK BORING HOLE DRILLING MACHINE N.T. AVAILABLE	5.4	160X160X360	1 : 1	3404-006

K1 TYPE USED CHUCK TO FIX THE TAP

K2, K3, K4 TYPE USED THE SLIDING PLATE OF THE SQUARE SHARP HOLE TO FIX THE TAP.



Tap Chuck Series

VTA13-3
MT2



VTA13-1
JT6



- THE DESIGN CAN PREVENT THE TAPS CHUCK FROM LOOSENING AFTER TAPPING.
- SUIT FOR VARIOUS TAPS. LARGE TAPPING CAPACITY. HIGH POWER TORSION.

TAP CHUCK WRENCH



Extra Purchase Welcome.

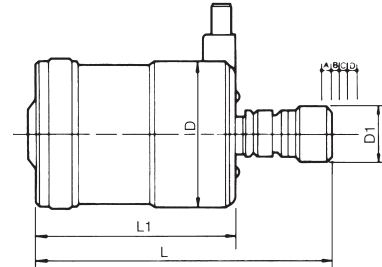
ORDER NO.	CONNECTING TAPER	TAPPING CAPABILITY	kgs	CODE NO.
VTA13-1	JT6	M3-M12 Ø1/8" - Ø1/2"	0.9	3404-000
VTA13-2	B16		1.1	3404-007
VTA13-3	MT2		0.8	3404-008
VTA16-1	JT3	M9-M18 Ø3/8" - Ø3/4"		3404-016
VTA16-2	B18		1.3	3404-017
VTA16-3	MT2		1.2	3404-018
VTA16-4	MT3		1.3	3404-019



Reversible Tapping Attachments



VERTEX®



- Radial Float is SELF-CENTERING to compensate for hole center misalignment.
- Unique Double Spring Mechanism produces Automatic Feed and Cushion Drive. There are two springs for the feed and two springs for the reversal. Each set gives you double smoothness for ULTRA accurate tapping applications (not possible with this type of tapping head in the past).
- Pre-set Torque Control Permits easy operation of tap brake torque control
- JACOBS RUBBER FLEX COLLETS are standard accessory.

Reversing Type

ATTACHMENT DESIGNATIONS ORDER NO.	FOR TAPS	SUITABLE ADAPTERS SIZE	REC. MAX SPEED	LENGTH COMPENSATION R.H. ROTATION NON ROTAT LH. ROTAT.				D DIA	D1 DIA	L	L1	WEIGHT (kgs)	CODE NO.
				COMP A	EXP. B	EXP. C	EXP. E						
VTA7-JT6	M2-M7	FC-10/FC-11	1500RPM	5	3.5	1.5	7.0	52	23	125.5	94.5	1.3	3404-020
VTA12-JT6	M3-M12	FC-20/FC-21	1000RPM	5	4.5	1.5	8.5	73.5	28	169	122	3.1	3404-021
VTA20-M20	M8-M20	FC-30/FC-31	600RPM	5.5	5	2.0	9.0	91	38	190	128	5.7	3404-022

Rubber Flex Collet For VTA Tapper

ORDER NO.	COLLETS CAPACITY	D4	L	CODE NO.
FC-10	Ø 2.5 - Ø 4.5	16	11	3404-030
FC-11	Ø 4.5 - Ø 6.5	16	11	3404-031
FC-20	Ø 4 - Ø 7	21.5	13	3404-032
FC-21	Ø 7.5 - Ø 10	21.5	13	3404-033
FC-30	Ø 8.0 - Ø 16	26.5	15	3404-034
FC-31	Ø 14 - Ø 19	26.5	15	3404-035



CONNECTING ARBOR FOR VTA20-M20	
MT3-M20	3404-036A
MT4-M20	3404-037A



Tap Chuck



VERTEX



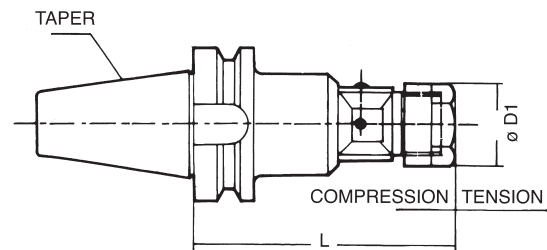
- It's suitable for various taps, so it is much more economic and efficient than other brands of taps chuck.
- The design can prevent the taps chuck from loosening after tapping.

Unit:mm

ORDER NO.	SIZE	TAPPING CAPACITY		Taper Mount NO. DIN or Jacobs	Length (m/m)	Outer Dia. (m/m)	Weight (g)	CODE NO.
		mm	inch					
VTA-35000	1/2	M4-M12	1/8-1/2	JT6	75	42	850	3404-056
VTA-35002	1/2	M4-M12	1/8-1/2	B16	75	42	585	3404-057



Expansible Tapping Holder



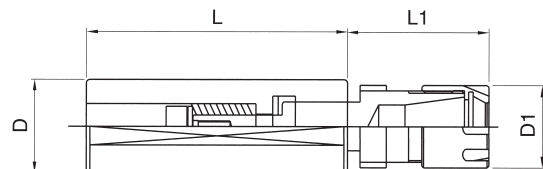
HOLDER-BT-TYPE

Unit:mm

ORDER NO.	COLLET	HOLDER (DXL)	L ₁	D ₁	TAPPING RANGE	WEIGHT (KGS)	CODE NO.
VET-271	ER20	BT40 20X110	110	34	M2-M16	2.2	3404-026
VET-272	ER20	BT50 20X95	95	34		4	3404-027
VET-273	ER32	BT40 32X110	110	50	M3-M25	2.4	3404-028
VET-274	ER32	BT50 32X110	110	50		4.5	3404-029



WITH SPANNER



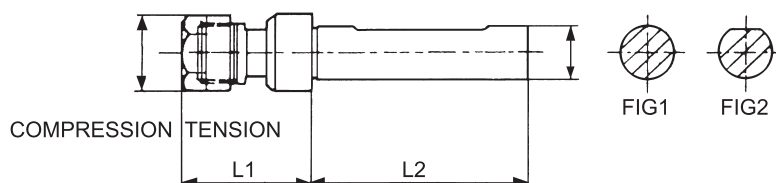
HOLDER-MINI TYPE

Unit:mm

ORDER NO.	COLLET	HOLDER (DXL)	L ₁	D ₁	TAPPING RANGE	WEIGHT (KG)	CODE NO.
VET-260	ER16	ER16M 20X70	35	22	M3-M10 1/8"-3/8"	0.2	3404-036
VET-261	ER16	ER16M 25X70	35	22		0.2	3404-037

- Floating and expansion design will reduce the differential of motor rotary speed and feeding speed so will extend the life of tap.
- Use ER High Spring Collet, you don't need to worry the few size will delay working, so their value is more than any other tapping system.
- Strong Vise clamping function which is controlled by one screw will keep the outlet which have been controlled by ER collet, so it can auto-center and you own the double lock and save in clamping.
- The series. can be fitted with ER20 collet as optional accessory.

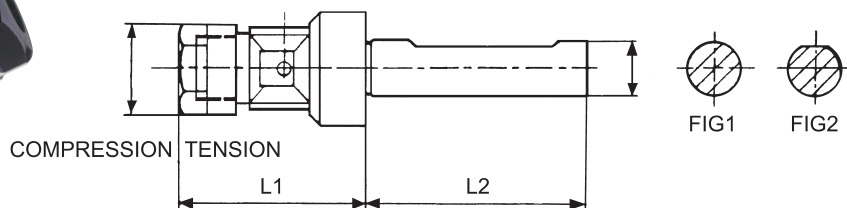
STRAIGHT SHANK



SINGLE HOLDER

Unit:mm

ORDER NO.	COLLET	HOLDER (D ₂ XL ₂)	FIG	L ₁	D ₁	TAPPING RANGE	WEIGHT (KG)	CODE NO.
VET-102	ER16	20X80	2	47	28	(1/8"-3/8")	0.4	3404-041



SINGLE HOLDER

Unit:mm

ORDER NO.	COLLET	HOLDER (D ₂ XL ₂)	FIG	L ₁	D ₁	TAPPING RANGE	WEIGHT (KG)	CODE NO.
VET-202	ER20	20X80	2	70	34	M3-M16	1	3404-043
VET-252	ER20	25X80	2	70	34	(1/8-5/8")	1.2	3404-044
VET-303	ER32	32X100		90	50	(M3-M25) (1/8-1")	2	3404-045



SETS TYPE

Unit:mm

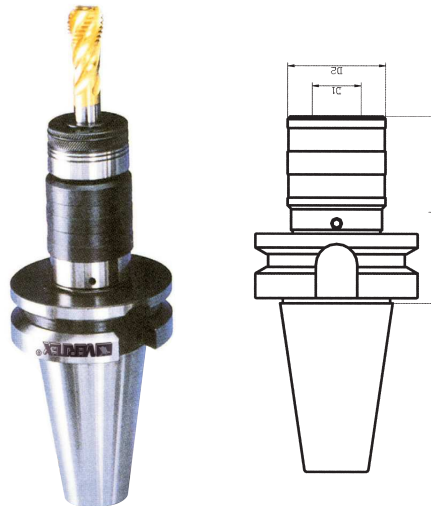
ORDER NO.	COLLET	HOLDER (D ₂ XL ₂)	SET/PCS	WEIGHT (KG)	CODE NO.
VET-105	ER16	20X80	8	1	3404-046
VET-106	ER16	20X80	10	1.1	3404-047
VET-253	ER20	20X80	10	1.6	3404-048
VET-254	ER20	20X80	12	1.7	3404-049



Quick Change Tapping Chucks


VERTEX®

European Type



WITH LENGTH COMPENSATION

CHUCK SHANK

ORDER NO.	Thread Size	L	ØD1	ØD2	Length Compensation		Collets	CODE NO.
					Compression	Tension		
BT30-WF12	M3-M12	67	19	39	7.5	7.5	TC-312	3404-181
BT30-WF20	M8-M20	94	31	55	12.5	12.5	TC-820	3404-182
BT40-WF12	M3-M12	72	19	39	7.5	7.5	TC-312	3404-183
BT40-WF20	M8-M20	94	31	55	12.5	12.5	TC-820	3404-184
BT50-WF12	M3-M12	83	19	39	7.5	7.5	TC-312	3404-185
BT50-WF20	M8-M20	105	31	55	12.5	12.5	TC-820	3404-186

NEW



SET TYPE

SHANK WITH 7 PCS/SET OVERLOAD CLUTCH
TAPPING COLLET DIN, ISO & JIS SYSTEMS:
PLEASE SEE PAGE 100.

Collets Size

TC-312	M3, M4, M5, M6, M8, M10, M12
TC-820	M8, M10, M12, M14, M16, M18, M20

SETS

ORDER NO.	SHANK Size	Thread Size	L	ØD1	ØD2	Length Compensation		Collets	PCS/ SET	CODE NO.
						Compression	Tension			
VQT-312	BT-30	M3-M12	67	19	39	7.5	7.5	TC-312	7PCS	3404-190
VQT-320	BT-30	M8-M20	94	31	55	12.5	12.5	TC-820	7PCS	3404-191
VQT-412	BT-40	M3-M12	72	19	39	7.5	7.5	TC-312	7PCS	3404-192
VQT-420	BT-40	M8-M20	94	31	55	12.5	12.5	TC-820	7PCS	3404-193
VQT-512	BT-50	M3-M12	83	19	39	7.5	7.5	TC-312	7PCS	3404-194
VQT-520	BT-50	M8-M20	105	31	55	12.5	12.5	TC-820	7PCS	3404-195

Please inform the collet size when ordering.

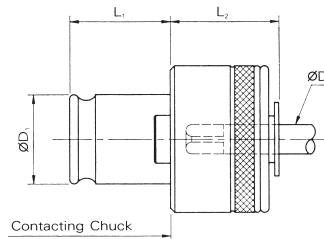
Please use following page as reference for collet size.



Quick Change Tapping Chucks



QUICK CHANGE TAP COLLETS (with overload clutch)



JIS SYSTEM SIZE

1PC ≅ 0.18kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD	□					
TC 312 (#1)	M3	4	3.2	19	22	25	312-01	3404-200
	M4	5	4				312-02	3404-201
	M5	5.5	4.5				312-03	3404-202
	M6	6	4.5				312-04	3404-203
	M7	6.2	5				312-05	3404-204
	M8	6.2	5				312-06	3404-205
	M9	7	5.5				312-07	3404-206
	M10	7	5.5				312-08	3404-207
	M11	8	6				312-09	3404-208
	M12	8.5	6.5				312-10	3404-209
	•M14	10.5	8				•312-11	3404-210
	•M15	10.5	8				•312-12	3404-211
	UNC 1/4	6	4.5				312-13	3404-212
	UNC 5/16	6.1	5				312-14	3404-213
	UNC 3/8	7	5.5				312-15	3404-214
	UNC 7/16	8	6				312-16	3404-215
	UNC 1/2	9	7				312-17	3404-216
	•UNC 9/16	10.5	8				•312-18	3404-217
	PT 1/8	8	6				312-19	3404-218
	PT 1/4	11	9				312-20	3404-219

1PC ≅ 0.6kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD	□					
TC 820 (#2)	M7	6.2	5	31	36	30.5	820-01	3404-230
	M8	6.2	5				820-02	3404-231
	M9	7	5.5				820-03	3404-232
	M10	7	5.5				820-04	3404-233
	M11	8	6				820-05	3404-234
	M12	8.5	6.5				820-06	3404-235
	M14	10.5	8				820-07	3404-226
	M15	10.5	8				820-08	3404-237
	M16	12.5	10				820-09	3404-238
	M17	13	10				820-10	3404-239
	M18	14	11				820-11	3404-240
	M20	15	12				820-12	3404-241
	M22	17	13				820-13	3404-242
	UNC 3/8	7	5.5				820-14	3404-243
	UNC 7/16	8	6				820-15	3404-244
	UNC 1/2	9	7				820-16	3404-245
	UNC 9/16	10.5	8				820-17	3404-246
	UNC 5/8	12	9				820-18	3404-247
	UNC 3/4	14	11				820-19	3404-248
	UNC 7/8	17	13				820-20	3404-249
	PT 1/8	8	6				820-21	3404-250
	PT 1/4	11	9				820-22	3404-251
	PT 3/8	14	11				820-23	3404-252
	PT 1/2	18	14				820-24	3404-253
	M24	19	15				820-25	3404-254



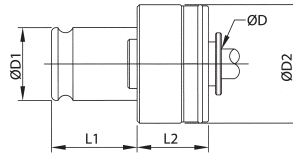
- Torque is factory-set to protect the tap for which a particular collet is designed. Small adjustments can be made by a trained user to accommodate tap strength and material variations.
- Collet stops driving when set torque is exceeded.
- A collet is necessary for each tap shank diameter.

1PC ≅ 1.8kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD	□					
TC 1433 (#3)	M14	10.5	8	48	56	45	1433-01	3404-260
	M15	10.5	8				1433-02	3404-261
	M16	12.5	10				1433-03	3404-262
	M17	13	10				1433-04	3404-263
	M18	14	11				1433-05	3404-264
	M20	15	12				1433-06	3404-265
	M22	17	13				1433-07	3404-266
	M24	19	15				1433-08	3404-267
	M25	19	15				1433-09	3404-268
	M26	20	15				1433-10	3404-269
	M27	20	15				1433-11	3404-270
	M28	21	17				1433-12	3404-271
	M30	23	17				1433-13	3404-272
	M32	24	19				1433-14	3404-273
	M33	25	19				1433-15	3404-274
	M34	26	21				1433-16	3404-275
	M35	26	21				1433-17	3404-276
	M36	28	21				1433-18	3404-277
	UNC 9/16	10.5	8				V433-19	3404-278
	UNC 5/8	12	9				1433-20	3404-279
	UNC 3/4	14	11				1433-21	3404-280
	UNC 7/8	17	13				1433-22	3404-281
	UNC 1	20	15				1433-23	3404-282
	UNC 1 1/8	22	17				1433-24	3404-283
	UNC 1 1/4	24	19				1433-25	3404-284
	UNC 1 3/8	26	21				1433-26	3404-285
	UNC 1/4	11	9				1433-27	3404-286
	PT 3/8	14	11				1433-28	3404-287
	PT 1/2	18	14				1433-29	3404-288
	PT 3/4	23	17				1433-30	3404-289
	PT 1	26	21				1433-31	3404-290



Quick Change Tapping Chucks



- Torque is factory-set to protect the tap for which a particular collet is designed. Small adjustments can be made by a trained user to accommodate tap strength and material variations.
- Collet stops driving when set torque is exceeded.
- A collet is necessary for each tap shank diameter.

DIN 371 Type

ORDER NO.	Size	TC312 DIN 371 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-01D	TC 312 DIN 371	M1~M1.8	2.5	2.1	M3~M14	22.5	25	19	32	3404-501
312-02D		M2~M2.5	2.8	2.1						3404-502
312-03D		M3	3.5	2.7						3404-503
312-04D		M3.5	4.0	3.0						3404-504
312-05D		M4	4.5	3.4						3404-505
312-06D		M4.5	6.0	4.9						3404-506
312-07D		M5	6.0	4.9						3404-507
312-08D		M6	6.0	4.9						3404-508
312-09D		M8	8.0	6.2						3404-509
312-10D		M10	10.0	8.0						3404-510

ORDER NO.	Size	TC820 DIN 371 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-01D	TC 820 DIN 371	M5	6.0	4.9	M8~M24	35	30.5	31	50	3404-521
820-02D		M6	6.0	4.9						3404-522
820-03D		M8	8.0	6.2						3404-523
820-04D		M10	10.0	8.0						3404-524

*Custom-built products are available on request.

DIN 376 Type

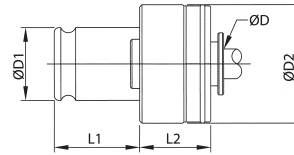
ORDER NO.	Size	TC312 DIN 376 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-21D	TC 312 DIN 376	M3.5	2.5	2.1	M3~M14	22.5	25	19	32	3404-531
312-22D		M4	2.8	2.1						3404-532
312-23D		M4.5	3.5	2.7						3404-533
312-24D		M5	3.5	2.7						3404-534
312-25D		M6	4.5	3.4						3404-535
312-26D		M7	5.5	4.3						3404-536
312-27D		M8	6.0	4.9						3404-537
312-28D		M10	7.0	5.5						3404-538
312-29D		M12	9.0	7.0						3404-539
312-30D		M14	11.0	9.0						3404-540
312-31D		M16	12.0	9.0						3404-541

ORDER NO.	Size	TC820 DIN 376 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-21D	TC 820 DIN 376	M8	6.0	4.9	M8~M24	35	30.5	31	50	3404-551
820-22D		M10	7.0	5.5						3404-552
820-23D		M12	9.0	7.0						3404-553
820-24D		M14	11.0	9.0						3404-554
820-25D		M16	12.0	9.0						3404-555
820-26D		M18	14.0	11.0						3404-556
820-27D		M20	16.0	12.0						3404-557
820-28D		M22	18.0	14.5						3404-558
820-29D		M24	18.0	14.5						3404-559

ORDER NO.	Size	TC1433 DIN 376 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
1433-01D	TC 1433 DIN 376	M14	11.0	9.0	M14~M36	55.5	45	48	72	3404-571
1433-02D		M16	12.0	9.0						3404-572
1433-03D		M18	14.0	11.0						3404-573
1433-04D		M20	16.0	12.0						3404-574
1433-05D		M22	18.0	14.5						3404-575
1433-06D		M24	18.0	14.5						3404-576
1433-07D		M27	20.0	16.0						3404-577
1433-08D		M30	22.0	18.0						3404-578
1433-09D		M33	25.0	20.0						3404-579
1433-10D		M36	28.0	22.0						3404-580



Quick Change Tapping Chucks



ISO 529 Type

ORDER NO.	Size	TC312 ISO 529 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-01I	TC 312 ISO 529	M1~M2	2.5	2.0	M3~M14	22.5	25	19	32	3404-601
312-02I		M2.2~M2.5	2.8	2.24						3404-602
312-03I		M3	3.15	2.5						3404-603
312-04I		M3.5	3.55	2.8						3404-604
312-05I		M4	4.0	3.15						3404-605
312-06I		M4.5	4.5	3.55						3404-606
312-07I		M5	5.0	4.0						3404-607
312-08I		M6	6.3	5.0						3404-608
312-09I		M7	7.1	5.6						3404-609
312-10I		M8	8.0	6.3						3404-610
312-11I		M9	9.0	7.1						3404-611
312-12I		M10	10.0	8.0						3404-612

ORDER NO.	Size	TC820 ISO 529 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-01I	TC 820 ISO 529	M6	6.3	5.0	M8~M24	35	30.5	31	50	3404-621
820-02I		M7	7.1	5.6						3404-622
820-03I		M8	8.0	6.3						3404-623
820-04I		M9	9.0	7.1						3404-624
820-05I		M10	10.0	8.0						3404-625

*Custom-built products are available on request.

ISO 529/2283 Type

ORDER NO.	Size	TC312 ISO 529/2283 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
312-21I	TC 312 ISO 529/2283	M3	2.24	1.8	M3~M14	22.5	25	19	32	3404-631
312-22I		M3.5	2.5	2.0						3404-632
312-23I		M4	3.15	2.5						3404-633
312-24I		M4.5	3.55	2.8						3404-634
312-25I		M5	4.0	3.15						3404-635
312-26I		M6	4.5	3.55						3404-636
312-27I		M7	5.6	4.5						3404-637
312-28I		M8	6.3	5.0						3404-638
312-29I		M9	7.1	5.6						3404-639
312-30I		M10	8.0	6.3						3404-640
312-31I		M12	9.0	7.1						3404-641
312-32I		M14	11.2	9.0						3404-642

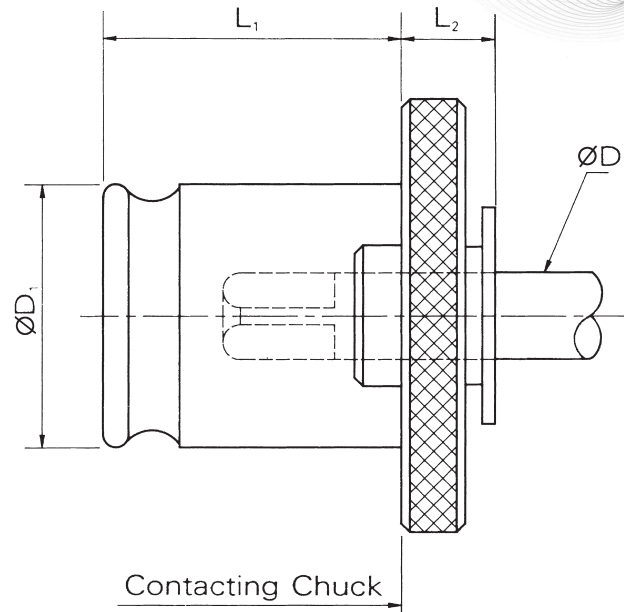
ORDER NO.	Size	TC820 ISO 529/2283 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
820-21I	TC 820 ISO 529/2283	M8	6.3	5.0	M8~M24	35	30.5	31	50	3404-651
820-22I		M9	7.1	5.6						3404-652
820-23I		M10	8.0	6.3						3404-653
820-24I		M12	9.0	7.1						3404-654
820-25I		M14	11.2	9.0						3404-655
820-26I		M16	12.5	10.0						3404-656
820-27I		M18	14.0	11.2						3404-657
820-29I		M20	14.0	11.2						3404-658
820-30I		M22	16.0	12.5						3404-659
820-31I		M24	18.0	14.0						3404-660

ORDER NO.	Size	TC1433 ISO 529/2283 Tap	Tap Shank		Capacity	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)	CODE NO.
			ØD	□						
1433-01I	TC 1433 ISO 529/2283	M14	11.2	9.0	M14~M36	55.5	45	48	72	3404-671
1433-02I		M16	12.5	10.0						3404-672
1433-03I		M18	14.0	11.2						3404-673
1433-04I		M20	14.0	11.2						3404-674
1433-05I		M22	16.0	12.5						3404-675
1433-06I		M24	18.0	14.0						3404-676
1433-07I		M27	20.0	16.0						3404-677
1433-08I		M30	20.0	16.0						3404-678
1433-09I		M33	22.4	18.0						3404-679
1433-10I		M36	25.0	20.0						3404-680



Quick Change Tapping Chucks

QUICK CHANGE TAP COLLETS
(without overload clutch)



JIS SYSTEM SIZE

1PC ≒ 0.08kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD						
TC312B (#1)	M3	4	3.2	19	21.5	7	312B-01	3404-300
	M4	5	4				312B-02	3404-301
	M5	5.5	4.5				312B-03	3404-302
	M6	6	4.5				312B-04	3404-303
	UNC 5/16	6.1	5				312B-05	3404-304
	M7/M8	6.2	5				312B-06	3404-305
	M9/M10	7	5.5				312B-07	3404-306
	M11	8	6				312B-08	3404-307
	M12	8.5	6.5				312B-09	3404-308
	UNC 1/2	9	7				312B-10	3404-309
	M14	10.5	8				312B-11	3404-310
	PT 1/4	11	9				312B-20	3404-311

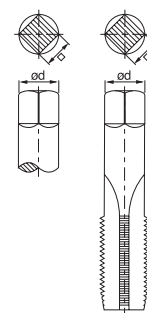
● A collet is necessary for each tap shank diameter.

1PC ≒ 0.28kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD						
TC820B (#2)	M7/M8	6.2	5	31	35	11	820B-01	3404-330
	M9/M10	7	5.5				820B-02	3404-331
	M11	8	6				820B-03	3404-332
	M12	8.5	6.5				820B-04	3404-333
	UNC 1/2	9	7				820B-05	3404-334
	M14	10.5	8				820B-06	3404-335
	PT 1/4	11	9				820B-07	3404-336
	UNC 5/8	12	9				820B-08	3404-337
	M16	12.5	10				820B-09	3404-338
	M17	13	10				820B-10	3404-339
	M18	14	11				820B-11	3404-340
	M20	15	12				820B-12	3404-341
	M22	17	13				820B-13	3404-342
	PT 1/2	18	14				820B-14	3404-343

1PC ≒ 0.8kg

Size	Thread	Tap Shank		Ø D1	L1	L2	ORDER NO.	CODE NO.
		ØD						
TC1433B (#3)	M14/M15	10.5	8	48	55.5	14	1433B-01	3404-360
	PT 1/4	11	9				1433B-02	3404-361
	UNC 5/8	12	9				1433B-03	3404-362
	M16	12.5	10				1433B-04	3404-363
	M17	13	10				1433B-05	3404-364
	M18	14	11				1433B-06	3404-365
	M20	15	12				1433B-07	3404-366
	M22	17	13				1433B-08	3404-367
	PT 1/2	18	14				1433B-09	3404-368
	M24/M25	19	15				1433B-10	3404-369
	M26/M27	20	15				1433B-11	3404-370
	M28	21	17				1433B-12	3404-371
	UNC 11/8	22	17				1433B-13	3404-372
	M30	23	17				1433B-14	3404-373
	M32	24	19				1433B-15	3404-374
	M33	25	19				1433B-16	3404-375
	M34/M35	26	21				1433B-17	3404-376
	M36/M38	28	21				1433B-18	3404-377





Mini Type Arm Type Air Tapping Unit

HIGH TORQUE HIGH EFFICIENCY EASY OPERATION



VERTEX



ACCESSORIES

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib
- Without stand plate
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

ORDER NO.	VAT-708	VAT-712	VAT-716
For Tap	M3~M8	M5~M12	M8~M16
	TC-312	TC-312	TC-820
Speed (rpm)	630/700	350/400	250
Weight (kgs)	13.2	13.1	17.3
Work Range	Rmax 700mm		
CODE NO.	3404-410	3404-411	3404-412



Small Arm Type Air Tapping Unit

HIGH TORQUE HIGH EFFICIENCY EASY OPERATION



ACCESSORIES

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib, increases arm reach by 500mm
- Without stand plate
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

ORDER NO.	VAT-1408	VAT-1412	VAT-1416
For Tap	M3~M8	M5~M12	M8~M16
	TC-312	TC-312	TC-820
Speed (rpm)	700	400	250
Weight (kgs)	18.2	18.2	24.6
Work Range	Rmax 1400mm		
	Rmin 200mm		
CODE NO.	3404-415	3404-416	3404-417



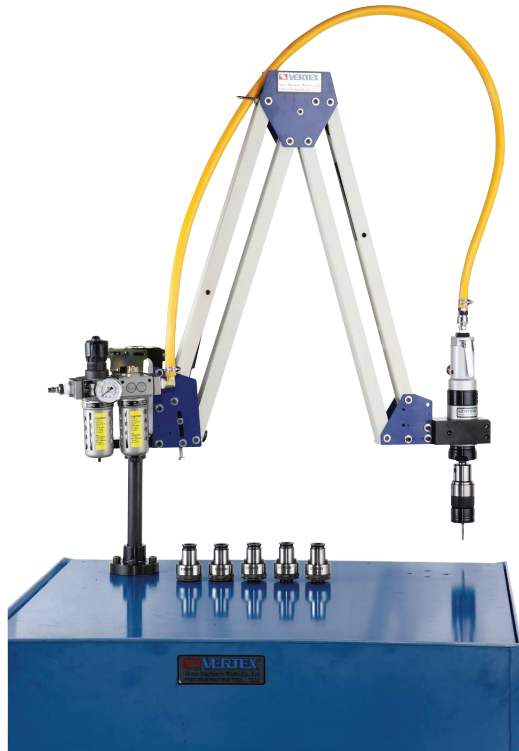
Arm Type Air Tapping Unit

HIGH TORQUE HIGH EFFICIENCY EASY OPERATION



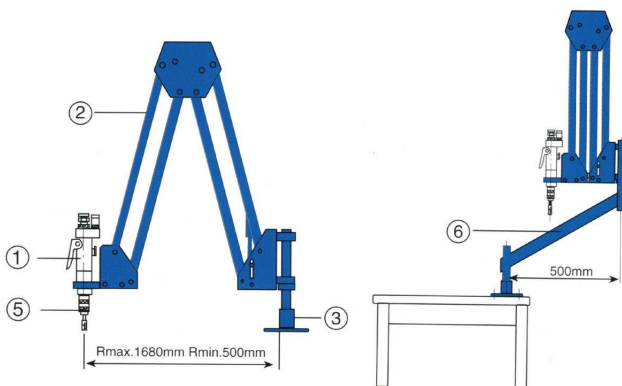
VERTEX

WORK RANGE
1600X500m/m
RMAX. X MIN.



VAT-1608/1612/1616

VAT-1908/1912/1916



WORK RANGE 1900X200m/m
RMAX. X RMIN.

ORDER NO.	VAT-1608	VAT-1612	VAT-1616
For Tap	M3~M8	M5~M12	M8~M16
	TC-312	TC-312	TC-820
Speed (rpm)	700	400	250
Weight (kgs)	16.9	17	21.1
Work Range	Rmax 1600mm		
	Rmin 500mm		
CODE NO.	3404-420	3404-421	3404-422

VAT-1608, 1612, 1616

STANDARD ACCESSORIES

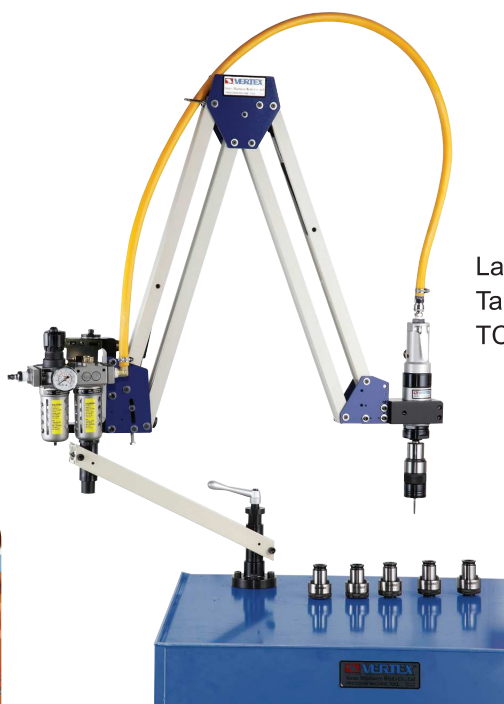
- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters

ORDER NO.	VAT-1908	VAT-1912	VAT-1916
For Tap	M3~M8	M5~M12	M8~M16
	TC-312	TC-312	TC-820
Speed (rpm)	700	400	250
Weight (kgs)	19.7	23.9	23.5
Work Range	Rmax 1900mm		
	Rmin 200mm		
CODE NO.	3404-425	3404-426	3404-427

VAT-1908, 1912, 1916

STANDARD ACCESSORIES

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib, increases arm reach by 500mm



Large Range Type For
Tap M10~M24,
TC-820

STANDARD ACCESSORIES:

- Air tapping spindle
- Parallel arm
- Table mounting column
- Air combination
- Choose any six safety clutch tapping adapters
- Radial jib, increases arm reach by 500mm
- Without stand plate
- Air pressure: 6~8 kgs/cm³
- VAT-08/12 series require: 5HP compressor
- VAT-16/20 series require: 10HP compressor

ORDER NO.	FOR TAP	SPEED (rpm)	WORK RANGE	WEIGHT (kgs)	CODE NO.
VAT-1920	M10-M20	180/200	Rmax 1900mm Rmin 200 mm	26	3404-430
VAT-1922	M12-M22	185/205			3404-431
VAT-1924	M14-M24	90/100		28	3404-431A

Air Tapping Spindle



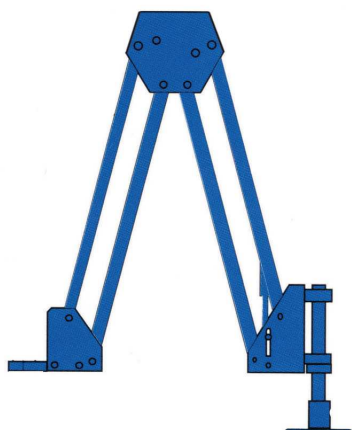
High torque, high efficiency for machining all tapping requirement. Light and handy main shaft design, easy operation.

The required pressure is 6.3kg/cm²=90 PSI.

- SP08 & SP12 Required 5 HP compressor and more.
 - SP16 & SP20 Required 10 HP compressor and more.
- (must keep the air pressure at 6.3kg/cm²)

ORDER NO.	TAPPING CAPACITY	SPEED (rpm)	MOUNTING DIA.	CODE NO.
VAT-SP08	M3-M8	630/700	ø38.5 (1 1/2")	3404-432
VAT-SP12	M5-M12	350/400	ø38.5 (1 1/2")	3404-433
VAT-SP16	M8-M16	230/250	ø61.3 (2 13/32")	3404-434
VAT-SP20	M10-M20	180/200	ø61.3 (2 13/32")	3404-435
VAT-SP22	M12-M22	185/205	ø61.3 (2 13/32")	3404-435A
VAT-SP24	M14-M24	90/100	ø61.3 (2 13/32")	3404-435B

Parallel Arm For Air Tapping Unit



PARALLEL ARM

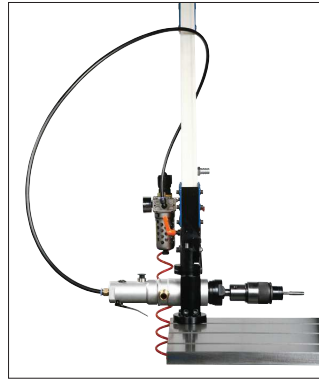
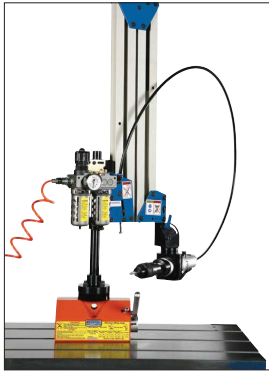
ORDER NO.	For The Air Tapping Unit	CODE NO.
VAT-ARM700-SP <input type="checkbox"/>	VAT-7 <input type="checkbox"/> 08, 7 <input type="checkbox"/> 12, 7 <input type="checkbox"/> 16	3404-436
VAT-ARM1400x200-SP <input type="checkbox"/>	VAT-14 <input type="checkbox"/> 08, 14 <input type="checkbox"/> 12, 14 <input type="checkbox"/> 16	3404-437
VAT-ARM1600x500-SP <input type="checkbox"/>	VAT-16 <input type="checkbox"/> 08, 16 <input type="checkbox"/> 12, 16 <input type="checkbox"/> 16	3404-438
VAT-ARM1900x200-SP <input type="checkbox"/>	VAT-19 <input type="checkbox"/> 08, 19 <input type="checkbox"/> 12, 19 <input type="checkbox"/> 16	3404-439



Adjustable Angle Head For Air Tapping Unit

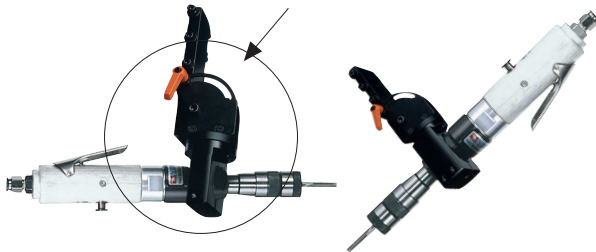


VERTEX



ORDER NO.	FOR VAT-TYPE		WEIGHT (kg)	CODE NO.
AT08-90°	VAT-708 VAT-1408	VAT-1608 VAT-1908	1.1	3404-440
AT12-90°	VAT-712 VAT-1412	VAT-1612 VAT-1912	1.1	3404-441

90° and Universal Degree

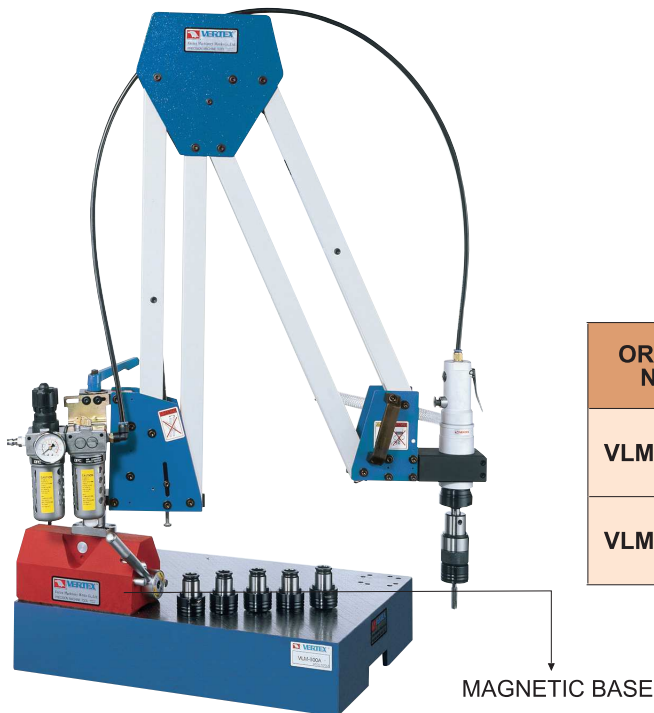


ORDER NO.	FOR VAT-TYPE		WEIGHT (kg)	CODE NO.
AT16-90°	VAT-716 VAT-1416	VAT-1616 VAT-1916	1.5	3404-442
AT20-90°	VAT-1920		1.5	3404-443
AT22-90°	VAT-1922		1.5	3404-444
AT24-90°	VAT-1924		1.5	3404-446



Magnetic Base For Air Tapping Unit

PORTABLE & MOVEABLE AIR TAPPING ARM



ORDER NO.	Magnetic Base		suit For VAT-Type	Weight (kgs)	CODE NO.
	Holding Power	Dimension LXWXH(mm)			
VLM-300A	300kg	155x90x93	VAT-7 <input type="checkbox"/> VAT-14 <input type="checkbox"/> VAT-16 <input type="checkbox"/>	9.4	3404-450
VLM-600A	600kg	224x115x120	VAT-1920 VAT-1922	21.9	3404-451



Mist Coolant System For Air Tapping Unit

**VERTEX®**

ORDER NO.VAC-08 CODE NO.3404-452

Without Oil

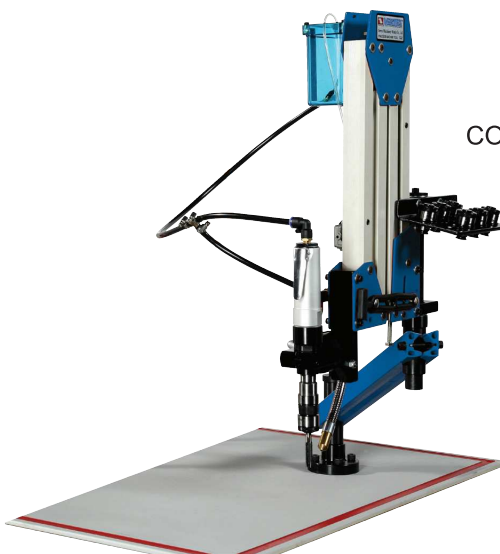


ENLARGE THE TAPPER LIFE 50%



Collet Rack For Air Tapping Unit

ORDER NO.VCR-08 CODE NO.3404-453



COLLET RACK

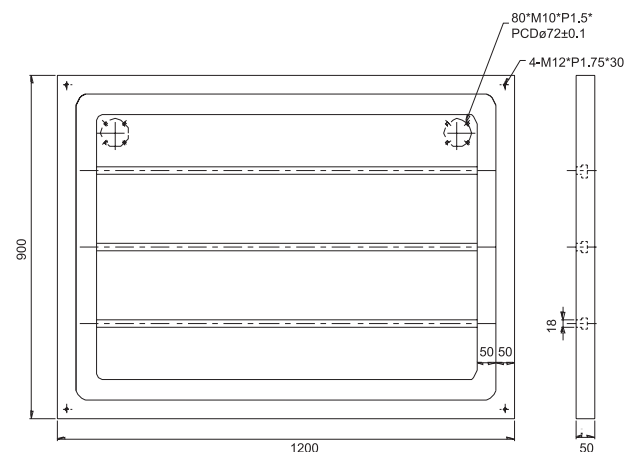


Working Table

ORDER NO.VAT-912T CODE NO.3404-445

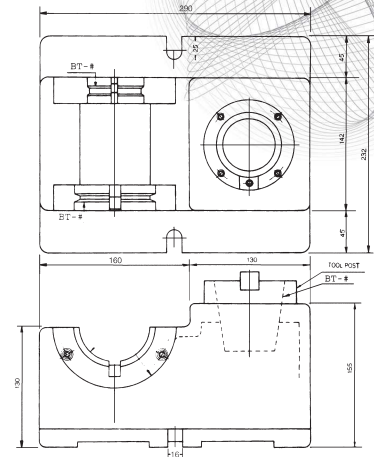


900x1200m/m 340kgs





Deluxe Type Tool Setting Stand



- This tool setting stand is one kind of subsidize tool for helping machine center to work efficiently. To be used fixing the tools on tool holder. It could avoid the method of using draw bar to fix (on machine center). It is safe, and doesn't effect the precision of machine's spindle.
- It's best for using on horizontal or vertical lines, simple & quick operations.
- A multi-function tool, it is changeable, has two kinds of specifications can be used. That is to say, one machine could be used as two sets machines.
- Additional special accessories to make your operating more convenient.
- CAT & SK share same model.

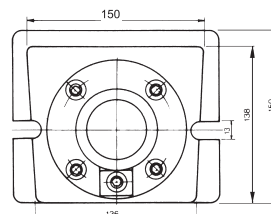
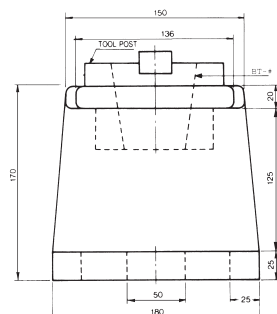
ORDER NO.	SHANK TAPERS		WEIGHT (kgs)	CODE NO.
	TOOL POST	ADAPTER HOLDING		
VTD-1	BT-#40x1	BT-#40x2	22.4	3405-001
VTD-2	BT-#50x1	BT-#50x2	22	3405-002
VTD-3	BT-#50x1	BT-#50x1 BT-#40x1	24	3405-003
VTD-4	BT-#40x1	BT-#50x1 BT-#40x1	24	3405-004
VTD-5	SK-40x1	SK-40x2	26	3405-005
VTD-6	SK-50x1	SK-50x2	24	3405-006
VTD-7	SK-50x1	SK-50x1 SK-40x1	25	3405-007
VTD-8	SK-40x1	SK-50x1 SK-40x1	25	3405-008
VTD-9	BT-30x1	BT-30x2	23	3405-009
VTD-10	SK-30x1	SK-30x2	23	3405-009A



Simple Type Tool Setting Stand



- This tool setting stand is one kind of subsidize tool for helping machine center to work efficiently. To be used fixing the tools on tool holder. It could avoid the method of using draw bar to fix (on machine center). It is safe, and doesn't effect the precision of machine's spindle.
- It is simple structive type. And could fix tooling on the above and hold the pull studs on the below of it. This is the excellent helping tools for simple, rapid and safe.



ORDER NO.	SHANK TAPERS	STD	WEIGHT (kg)	CODE NO.
VTS-BT-30	30	BT ISO NT	11.9	3405-010
VTS-BT-40	40		12.4	3405-011
VTS-BT-50	50		11.9	3405-012
VTS-SK-30	30	CAT DIN 69871A	13	3405-013
VTS-SK-40	40		12.4	3405-014
VTS-SK-50	50		12	3405-015



Tool Holder Locking Device



VERTEX



ORDER NO.	STD	WEIGHT (KGS)	CODE NO.
VTG-BT30	ISO BT	4.1	3405-020
VTG-BT40		4.2	3405-021
VTG-BT50		11.8	3405-022
VTG-SK30	CAT SK DIN69871A	3.7	3405-023
VTG-SK40		4	3405-024
VTG-SK50		12.3	3405-025



Tool Holder Locking Device

TILTING TYPE



ORDER NO.	STD	WEIGHT (KGS)	CODE NO.
VTL-BT30	ISO BT	4.2	3405-030
VTL-BT40		4.3	3405-031
VTL-BT50		9.8	3405-032
VTL-SK30	DIN69871A	4	3405-033
VTL-SK40		4	3405-034
VTL-SK50		8	3405-035
VTL-NT30	NT	4.2	3405-036
VTL-NT40		4.3	3405-037
VTL-NT50		9.8	3405-038



Tool Holder Locking Fixtures

HSK TYPE



ORDER NO.	STD	WEIGHT (KGS)	CODE NO.
VTL-HSK40	DIN69893 HSK	2.5	3405-046
VTL-HSK50		3.5	3405-047
VTL-HSK63		4.5	3405-048



End Mill Sheath Rack

ORDER NO.VMS-2 CODE NO.3405-050



VERTEX



Material:ABS
with 62 sheaths.

Unit:mm

CAPACITY RANGE	SIZE	WEIGHT (kg)
Ø6~Ø42	205x205x80	0.4



Spindle Taper Wiper



- Easily and quickly for cleaning spindle hole.
- Plastic body, the taper wiper is made of special cotton material, will not damage the spindle.
- The BT & DIN of taper are same

ORDER NO.	TAPER NO.	TOTAL LENGTH	WEIGHT (kg)	CODE NO.
VTW-30	#30	168mm	0.07	3405-060
VTW-40	#40	185mm	0.08	3405-061
VTW-50	#50	265mm	0.02	3405-062



Spindle Taper Wiper



H Type

A Type

ORDER NO.	TAPER NO.	TOTAL LENGTH	WEIGHT (kg)	CODE NO.
VTW-63A	HSK63A	166mm	0.2	3405-070
VTW-50H	HSK50	159mm	0.2	3405-071
VTW-63H	HSK63	167mm	0.2	3405-072



Tooling Carts

653W x 600D x 1460H mm



Features:

- Equipped with 8 adjustable sheath rack
- Max-load 200kgs
- Front and back 2 sides total allow up to 8 racks.



ORDER NO.	STD	TOOLING SHEATH CAPACITY	RACK	WEIGHT (kgs)	CODE NO.
VTT-1-30	BT-30 DIN 69871A	32 PCS/SET (BT-30)	4 adjustable sheath rack	52.27	3405-097
VTT-1-40	BT-40 DIN 69871A	28 PCS/SET (BT-40)		52.22	3405-098
VTT-1-50	BT-50 DIN 69871A	20 PCS/SET (BT-50)		52.29	3405-099

ORDER NO.	STD	TOOLING SHEATH CAPACITY	RACK	WEIGHT (kgs)	CODE NO.
VTT-1-30A	BT-30 DIN 69871A	64 PCS/SET (BT-30)	8 adjustable sheath rack	63.74	3405-097A
VTT-1-40A	BT-40 DIN 69871A	56 PCS/SET (BT-40)		63.64	3405-098A
VTT-1-50A	BT-50 DIN 69871A	40 PCS/SET (BT-50)		63.78	3405-099A



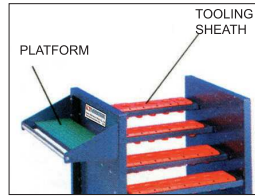
Tooling Trolleys



VERTEX



ORDER NO.:VTT-2
WEIGHT:51kgs



ORDER NO.	STD	TOOLING SHEATH CAPACITY	CODE NO.
VTT-2-30	BT-30 DIN 69871A	32 PCS/SET	3405-100
VTT-2-40	BT-40 DIN 69871A	28 PCS/SET	3405-101
VTT-2-50	BT-50 DIN 69871A	20 PCS/SET	3405-102



ORDER NO.:VTT-5
WEIGHT:64kgs
WITH 2 DRAWERS

ORDER NO.	STD	TOOLING SHEATH CAPACITY	CODE NO.
VTT-5-30	BT-30 DIN 69871A	32 PCS/SET	3405-110
VTT-5-40	BT-40 DIN 69871A	28 PCS/SET	3405-111
VTT-5-50	BT-50 DIN 69871A	20 PCS/SET	3405-112



ORDER NO.:VTT-6
WEIGHT:53kgs
WITH 1 DRAWERS

ORDER NO.	STD	TOOLING SHEATH CAPACITY	CODE NO.
VTT-6-30	BT-30 DIN 69871A	32 PCS/SET	3405-105
VTT-6-40	BT-40 DIN 69871A	28 PCS/SET	3405-106
VTT-6-50	BT-50 DIN 69871A	20 PCS/SET	3405-107



Tooling Sheath Rack

THE BT & DIN OF TAPER
ARE SAME.



SIZE
595mm(L)
143mm(W)
225mm(H)

ORDER NO.	WEIGHT(kgs)	CODE NO.
VTTR-BT-30	3.8	3405-120
VTTR-BT-40	3.7	3405-121
VTTR-BT-50	3.7	3405-122



Tooling Sheath

THE BT & DIN OF TAPER
ARE SAME.

ORDER NO.: VTTS-BT-30
WEIGHT:0.077kg

CODE NO. 3405-130
SIZE: 48 X 138 X 65mm

ORDER NO.: VTTS-BT-40
WEIGHT:0.085kg

CODE NO. 3405-131
SIZE: 63 X 138X 74mm

ORDER NO.: VTTS-BT-50
WEIGHT:0.123kg

CODE NO. 3405-132
SIZE: 93 X 138X 104mm





Tool Presetter

ORDER NO.TP-3040E CODE NO.3405-400



VERTEX®

TP-3040E ECONOMICAL-TYPE TOOL PRESETTER

- Z axis is provided the Square Carriage and treated by special scratch.
- The base of X axis is provided the Dove Tail Slot which is grind and treated by special scratch to ensure the durability of parallelism.
- Spindle sizes can be changed by using different sleeves(BT#50,#40, #30) to inspect different sizes of tools. The tool presetter of standard sleeve is BT-50
- The optional sleeve is O.D. BT-50 x I.D. BT-40 and O.D. BT-50 x I.D. BT-30
- Digimatic Readout is provided to display the measuring size.

STANDARD ACCESSORIES

Digimatic Readout (XxZ:200x450m/m)

Test Arbor BT#50(DxL:50x250mm)

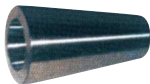
Dial Gauge (2 sets) 0.01mm

Protective Dust-Resistance Plastic Cover



OPTIONAL ACCESSORIES

1.SLEEVE



2.TEST ARBOR



ORDER NO.	SIZE	CODE NO.
S50-40	BT-50XBT-40	3405-410
S50-30	BT-50XBT-30	3405-411

ORDER NO.	SIZE	CODE NO.
A50	BT-50	3405-412
A40	BT-40	3405-413
A30	BT-30	3405-414

SPECIFICATIONS

Range of measurement	D:300mm, L:400mm
Graduation	Xaxis:0.01 mm
	Zaxis:0.01 mm
Machine Size (LxWxH)	662x222x862 mm
G.W	135kgs



Tool Presetter

ORDER NO.TP-3040 CODE NO.3405-401

TP-3040 DELUXE-TYPE TOOL PRESETTER

- The Z spindle use Swiss made non-pitch screw pole can quick move and minor adjustment. Move slightly and swiftly.
- The special equipment "Lock Up Setting" is installed around the spindle to reduce the aberration when measuring.
- Spindle sizes can be changed by using different sleeves to inspect different sizes of tools..
- The standard of sleeve is BT-50, the optional is O.D. BT-50 x I.D. BT-40, O.D. BT-50 x I.D. BT-30
- Germany Digimatic Readout is provided on X axis to display the measuring number.
- Ball Screw bearing Unit is provided on X axis to increase the accuracy.
- Tapered Bearing Units is provided on Z axis for making movement more smoothly.
- Precision Linear Guide is provided on Z axis for wear-resistance and long-term accuracy.

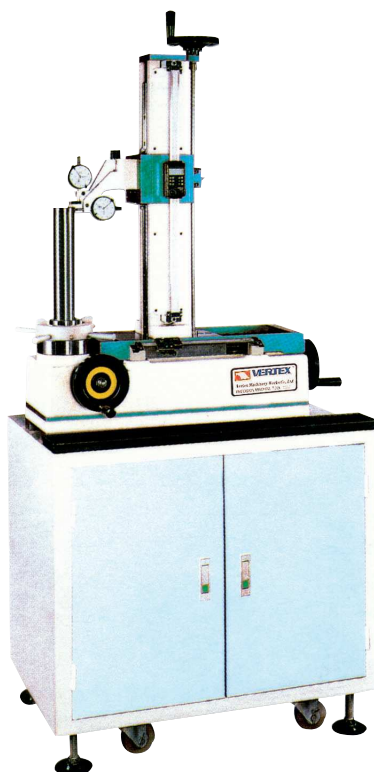
STANDARD ACCESSORIES

Digimatic Readout (XxZ:200x450m/m)

Test Arbor BT#50(DxL:50x250mm)

Cabinet

Dust-Resistance Plastic Cover



SPECIFICATIONS

Range of measurement	D:300mm, L:400mm
Graduation	Xaxis:0.01 mm
	Zaxis:0.01 mm
Size(LxWxH)	
Machine	662x222x860 mm
Cabinet	650x500x760 mm
Weight	
Machine	110kgs
G.W	135kgs



Tool Cabinet

ALL THE OVERALL SIZE IS WITH WHEELS HEIGHT.

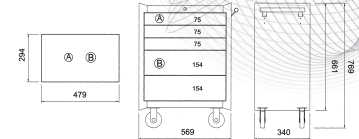


5 Drawers Roll Cabinet

Cuft: 6.9'

Net Weight: 31.3 kgs

Gross Weight: 34 kgs



- Ball bearing slide with Quick Disconnect
- Heavy Duty 4"x1" Caster
- Double wall construction
- Electro - Powder Coating to Resist Scratch & solvent markings
- 10mm Top Mat
- All drawers appended to Drawer Liners

ORDER NO.	CODE NO.
VTC-23	3405-144

570WX345DX650Hmm

	W	D	H
DRAWERS	480	292	75
DRAWERS	480	292	154

mm

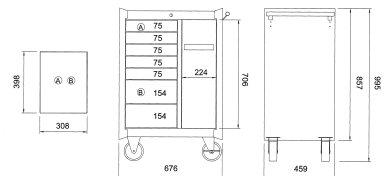


8 Drawers Roll Cabinet

Cuft: 13'

Net Weight: 67.9 kgs

Gross Weight: 72.1 kgs



- Ergonomic Large Drawer Design
- Ball bearing slide with Quick Disconnect
- Heavy Duty 5"x2" Caster
- Double wall construction
- Electro - Powder Coating to Resist Scratch & solvent markings
- 10mm Top Mat
- All drawers appended to Drawer Liners

ORDER NO.	CODE NO.
VTC-25	3405-149

680WX460DX830Hmm

	W	D	H
DRAWERS	308	395	75
DRAWERS	308	395	154

mm

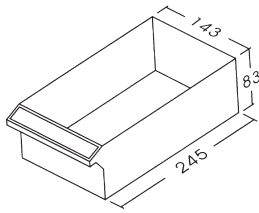


Tooling Trolleys

ORDER NO.VTC-100 CODE NO.3405-154



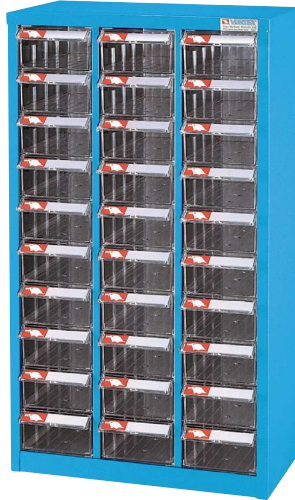
WxDxH	500x873x880 mm
Package	1PC/1CTN/2.73CUFT
N.W.	23.91KGS
G.W.	25.90KGS



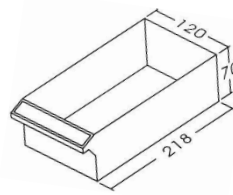
THE SIZE OF DRAWER
245D x 143W x 83H (m/m)



ORDER NO. VA6-212H



ORDER NO. VA6-330H



THE SIZE OF DRAWER
218D x 120W x 70H (m/m)



ORDER NO. VA7-324P



ORDER NO. VA7-448P

ORDER NO.	SIZE (m/m)	METAL	DRAWER NUMBERS	WEIGHT(kgs)	CODE NO.
	W x D x H				
VA6-212H	362 x 265 x 571	STEEL PLATE COVER WITH ZINC. Drawer material: GPS	12PCS	10.8	3405-200
VA6-330H	533 x 264 x 937		30PCS	25.3	3405-201
VA7-324P	440 x 222 x 642		24PCS	15.5	3405-202
VA7-448P	586 x 222 x 937		48PCS	27.5	3405-203
VA1-525	586 x 222 x 350		25PCS	10	3405-204
VA1-575	586 x 222 x 937		75PCS	32.3	3405-205



Tool Box



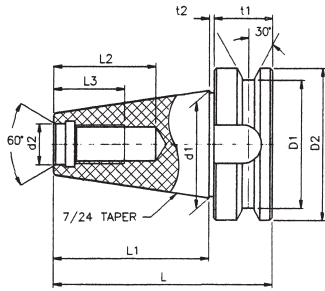
ORDER NO. VTB-102



ORDER NO. VTB-901

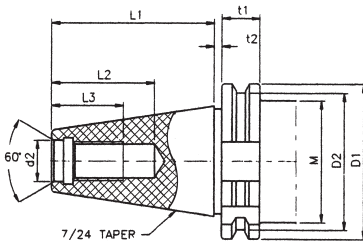


ORDER NO.	SIZE (m/m)	MATERIAL	WEIGHT(kg)	CODE NO.
	W x D x H			
VTB-102	420 x 235 x 180	ABS	1.9	3405-300
VTB-901	378 x 182 x 144		0.9	3405-301



MAS BT SHANK

SPECIFICATION	D1	D2	t1	t2	L1	L2	L3	L	d1	d2	G
BT30	46	38	20	2	48.4	34	24	70.4	31.75	12.5	M12
BT40**	63	53	25	2	65.4	70	30	92.4	44.45	17	M16
BT50**	100	85	35	3	101.8	90	45	139.8	69.85	25	M24



DIN 69871A SHANK

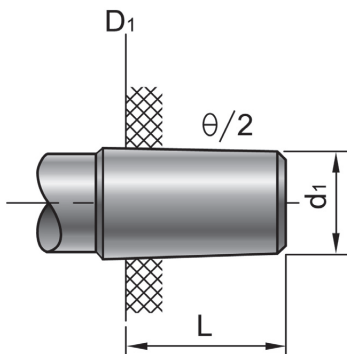
SPECIFICATION	D1	D2	t1	t2	L1	L2	L3	d1	d2	M	P	G
ISO 40	63.55	56.25	15.9	3.2	68.4	42.5	32	44.45	17	44.7	35	M16
ISO 50	97.5	91.25			101.75	61.5	47	69.85	25	70.1		M24

*DRAW BAR DIN 69872 A TYPE

Drill Chuck Taper

JACOBS TAPER

TYPE	$\theta/2$ TAPER	D1	d1	L
JT2	2° 19'52"	14.199	12.386	22.225
JT33	1° 49'01"	15.850	14.237	25.400
JT6	1° 29'88"	17.170	15.852	25.400
JT3	1° 31'26"	20.599	18.951	30.956
JT4	1° 29'59"	28.550	26.346	42.069
JT5	1° 29'05"	35.890	33.422	47.625



DIN 238

TYPE	$\theta/2$ TAPER	D1	d1	L
B12	1° 25'43"	12.065	11.1	18.5
B16	1° 25'50"	15.733	14.5	24.0
B18	1° 25'50"	17.780	16.2	32.0