

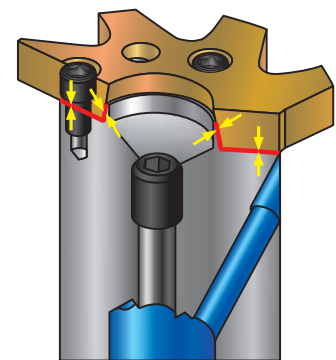
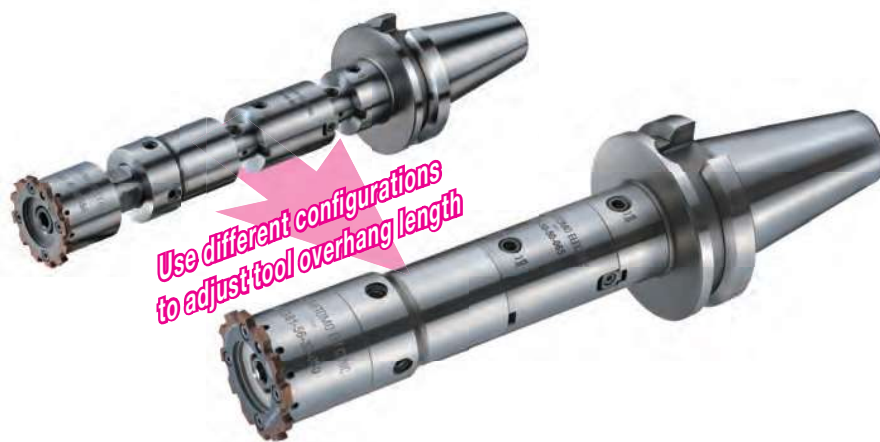


■ Features

- Achieves high efficiency through high speed and high feed capabilities!
($v_c=164$ to $1,640$ SFM, $f=0.016''$ to $0.047''$ IPR)
- Compatible with a wide range of cutting conditions, allowing management of cutting conditions and coolant supply
- Designed with minimal cutting edge length, eliminating galling and blemishes for improved quality and reliability
- Adoption of indexable cutting edge design improves reliability of quality and tool life, eliminating variability in tool life among reground inserts
- Cutting edge diameters from $\phi 7.6$ to $\phi 140.6$ mm available

● Easy insert replacement

● Flexible tool overhang lengths possible by combining the modular extension/arbor and shank with insert runout adjustment mechanism



A taper supports the insert on two faces (based on the HSK standard) for repeatability within $4\ \mu\text{m}$ using random inserts

■ Application Examples

Workpiece					
	Cylinder barrel	Connection rod	Sliding yoke	Front axle	Control valve
Part Material	Cast Iron	Forged Carbon Steel	Structural Steel	Forged 1020 Steel	Forged Carbon Steel
Holder Cat. No.	SRD19-12-115	SRD36-25-170	SRD19-12-115	SRD29-20-240	Special holder with guide pads
Insert Cat. No.	SRG17.0H7-A01-T1212R1	SRG29.0H7-A01-F0512R1	SRG16.02Q+3-3-C01-F0512R1	SRL28.0H7-B01-F0512R1	SRL14.0H7-B01-F0512R1
Max. Work Dia. (mm)	$\phi 17.0$	$\phi 29.0$	$\phi 16.02$	$\phi 28.0$	$\phi 14.0$
Hole Dia. Tolerance	H7	H7	H7	H7	H7
Surface Roughness (μm)	Rz10.0	Ra0.8	Ra3.2	Ra3.2	Ra1.6
Circularity (μm)	5	2	—	5	5
Cylindricity (μm)	5	4	—	5	5
Number of Teeth	6	8	6	8	6
v_c (m/min)	148	120	150	60	100
n (min^{-1})	2,772	1,318	2,982	682	2,230
f_z (mm/t)	0.20	0.15	0.10	0.075	0.10
v_f (m/min)	3,326	1,582	1,789	409	1,368
a_p (mm)	0.10	0.15	0.15	0.15	0.15
Wet / Dry	Wet	Wet	Wet	Wet	Wet
Tool life, etc.	57.9m	30.52m	—	15.8m	—

SR Small & Medium

ø7.600 - 13.100mm
ø35.601 - 140.600mm

Compensating Collet Chuck

J151, J157



Floating Chuck for Lathes

J136, J142



Collets

J153



Seal Disk for Collet Nut

J153



SR Small Holders

J150



SR Small Insert

J150



SR Small

ø7.600 - 13.100mm

Schunk "Tendo Zero" Compensation Hydro Chuck

J152, J158



Reducers for Hydro-Compensation Chuck "Schunk"

J153



ø7.600 - 13.100mm

Compensating Hydro Chuck

J151



Reducers for Hydro-Compensation Chuck

J153



SR Medium Holders

J156



SR Medium Insert

J154 & J155



SR Medium

ø35.601 - 140.600mm

System Holders Beta-Module

J161



(Optional) Extensions Beta-Module

J160



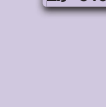
(Optional) Reducers Beta-Module

J160



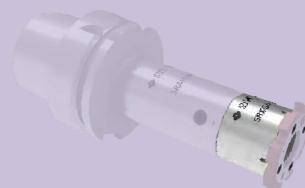
Shanks (with Integrated Compensation Device)

J160



Insert Holders

J159

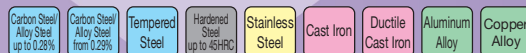


SR Medium Insert

J154 & J155

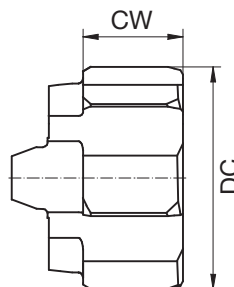


SumiReamer Small SR



Insert for SR Reamer - Small

- SRSG **General-Purpose** Straight Flutes: Stop and Through Holes
- SRSL Left Hand Helical Flutes: Through Holes



Small Insert SRSG / SRSL

Made to Order Items

Dia. DC Range (mm)	Holder Cat. No.		CW	No. of Teeth
	Stock	Straight Fluted Inserts		
ø7.600 to ø8.100		SRSG08□□□	4.5	4
ø8.101 to ø9.600		SRSG10□□□	4.5	6
ø9.601 to ø11.100		SRSG11□□□	4.5	6
ø11.101 to ø13.100		SRSG13□□□	4.5	6

*See below for DC tolerance.

SR Reamer - Small Insert Identification

Specifying Inserts Using Workpiece Hole Diameter Tolerance
The actual desired reamer diameter will be on the upper limit side of the median work tolerance, and will differ depending on diameter/tolerance range/grade. Contact Sumitomo Engineering Dept. for more details.

SR S G 18.2 + 20 - 10 - A01 - F05 12R 1

- | | |
|--------------------------------------|------------------------------------|
| (1) SR Reamer | (5) Tolerance (μm) +/- or standard |
| (2) Small | (6) Approach Angle Code |
| (3) G = Straight, L = Lefthand helix | (7) Grade Symbol |
| (4) Workpiece Bore Diameter (mm) | (8) Coating Code |

Specifying Inserts Using Desired Reamer Diameter

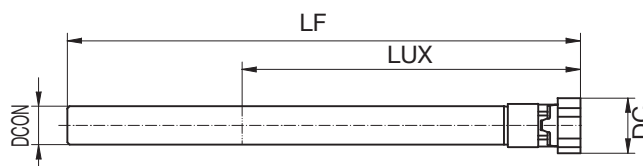
By adding a "Q" after the diameter, it is possible to specify exact desired reamer dimensions. Uncoated types are available within ±2μ, thin-coated layer types are available within ±3μ and thick-coated layer types are available within ±4μ.

SR S L 18.2 Q + 3 - 3 - A01 - F05 12R 1

- | | |
|---|----------------------------|
| (1) SR Reamer | (5) Tolerance (μm) +/--(6) |
| (2) Small | Approach Angle Code |
| (3) G = Straight, L = Lefthand helix | (7) Grade Symbol |
| (4) Median Desired Cutting Edge Diameter (mm) | (8) Coating Code |

Small Holder

- Single insert screw improves insert replacement efficiency
- Capable of high-torque (high-load) machining



Steel Shank Insert Holder SRSD / SRSB

Dimensions (mm)

Dia. DC Range	Holder Cat. No.		Shank Dia. DCON	Overall Length LF	Usable Length LUX	Insert Screws		N·m
	Stock	Straight Fluted Inserts				SRSD	SRSB	
ø7.600 to ø8.100	★	SRSD08-06-086	★	SRSD08-06-086	6	86	50	C00-90-51 C00-90-51 0.6
ø8.101 to ø9.600	★	SRSD10-06-096	★	SRSD10-06-096	6	96	60	C00-90-52 C00-90-52 0.9
ø9.601 to ø11.100	★	SRSD11-08-106	★	SRSD11-08-106	8	106	70	C00-90-53 C00-90-53B 1.4
ø11.101 to ø13.100	★	SRSD13-08-120	★	SRSD13-08-120	8	120	84	C00-90-54 C00-90-54B 2.0

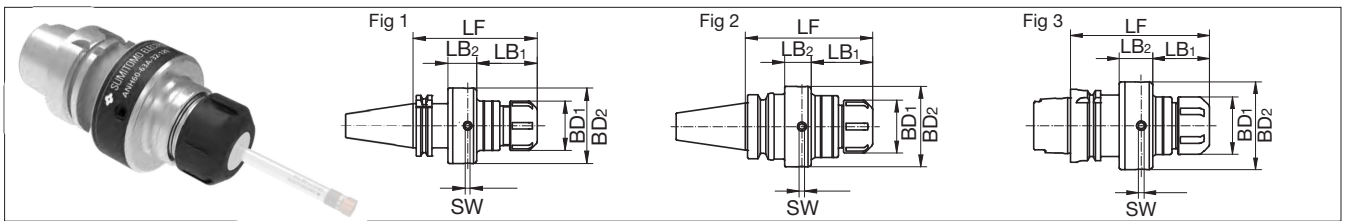
Carbide Shank Insert Holder SRSD/ SRSB

Dimensions (mm)

Dia. DC Range	Holder Cat. No.		Shank Dia. DCON	Overall Length LF	Usable Length LUX	Insert Screws		N·m
	Stock	Straight Fluted Inserts				SRSD	SRSB	
ø7.600 to ø8.100	★	SRSD08-06-102HM	★	SRSD08-06-102HM	6	102	66	C00-90-51 C00-90-51 0.6
ø8.101 to ø9.600	★	SRSD10-06-116HM	★	SRSD10-06-116HM	6	116	80	C00-90-52 C00-90-52 0.9
ø9.601 to ø11.100	★	SRSD11-08-126HM	★	SRSD11-08-126HM	8	126	90	C00-90-53 C00-90-53B 1.4
ø11.101 to ø13.100	★	SRSD13-08-150HM	★	SRSD13-08-150HM	8	150	114	C00-90-54 C00-90-54B 2.0

★: Worldwide Warehouse Item

Compensation Collet Chuck (ø7.600 to ø13.100)



DIN 69871-AD

Cat. No.	Stock	Size	Type	Dia. Range	BD2	BD1	Gage Length LF	LB1	LB2	Adjustment screw SW	Weight (kg)	Fig
AND60-40A-32-120	★	SK40	ER32	3.0 to 20.0	76	50	120	56	29	5	2.2	1
AND60-50A-32-120	★	SK50	ER32	3.0 to 20.0	76	50	120	61	24	5	4.1	1

MAS-BT JIS 6339-AD

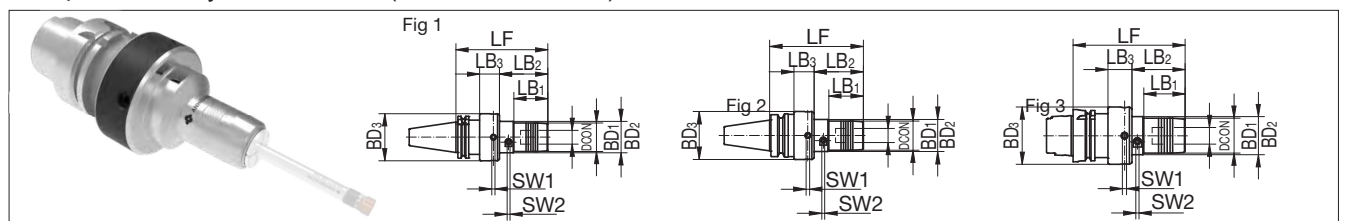
Cat. No.	Stock	Size	Type	Dia. Range	BD2	BD1	Gage Length LF	LB1	LB2	Adjustment screw SW	Weight (kg)	Fig
ANT60-40A-32-120	★	BT40	ER32	3.0 to 20.0	76	50	120	54	29	5	2.2	2
ANT60-50A-32-120	★	BT50	ER32	3.0 to 20.0	76	50	120	58	24	5	4.5	2

*Adjustment Screw "SW" C00 03 44 (4x) for all compensation collet chucks

DIN 69893-HSK-A

Cat. No.	Stock	Size	Type	Dia. Range	BD2	BD1	Gage Length LF	LB1	LB2	Adjustment Screw SW	Weight (kg)	Fig
ANH60-63A-32-120	★	HSK63	ER32	3.0 to 20.0	76	50	120	49	29	5	2	3
ANH60-100A-32-120	★	HSK100	ER32	3.0 to 20.0	76	50	120	67	24	5	3.4	3

Compensation Hydraulic Chuck (ø7.600 to ø13.100)



DIN 69871-AD

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
204266Z	★	CAT40	42	20	50	81	34	62	15IP	1.4	1
204246Z	★	CAT50	42	20	50	81	34	62	15IP	3.3	1

MAS-BT JIS 6339-AD/B

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
205636Z	★	BT30	42	20	45	90	48	63	15IP	1.5	2
204443Z	★	BT40	32	12	45	90	45	63	15IP	1.4	2
204455Z	★	BT50	32	12	45	90	34	52	15IP	4	2

DIN 69893-HSK-A

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
204054Z	★	HSK63	42	12	50	90	48	64	15IP	1.3	3
204064Z	★	HSK100	42	12	50	105	59	76	15IP	2.8	3

Spare Parts for Small Holders

Dia. DC Range	Insert Screws	
	SRSD	SRSB
ø7.600 to ø8.100	C00-9051	C00-90-51
ø8.101 to ø9.600	C00-90-52	C00-90-52
ø9.601 to ø11.100	C00-90-53	C00-90-53B
ø11.101 to ø13.100	C00-90-54	C00-90-54B

★: Worldwide Warehouse Item

Spare Parts

Diameter DCON	
12	C00-03-44
20	C00-03-44
32	C00-03-45

Adjustment Screw (SW1) for
Compensation Hydraulic Chucks

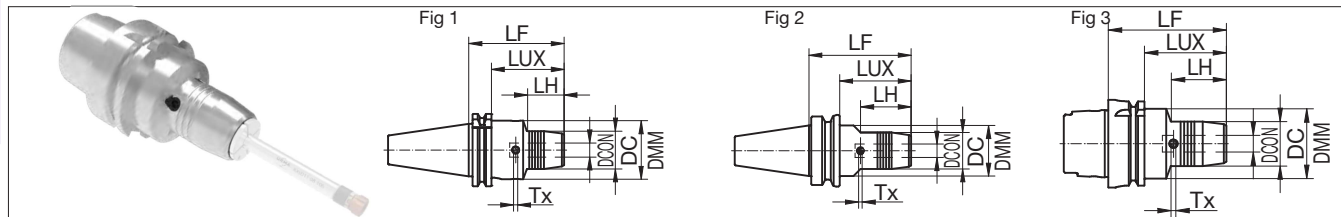
Coolant Tubes

Taper Size	
HSK40	H00-40-01
HSK63	H00-63-01
HSK100	H00-100-01

For the HSK arbor.

Schunk "TENDOzero" Compensating Hydraulic Chuck (ø7.600 to ø13.100mm)

Drilling



DIN 69871-AD

Dimensions (mm)

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
1447893	★	CAT40	42	20	50	63.5	25	44.4	15IP	1.4	1
1447946	★	CAT50	42	20	50	81	34	62	15IP	3.3	1

MAS-BT JIS / DIN 7388-2

Dimensions (mm)

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
205636Z	★	BT30	42	16	45	90	48	63	15IP	1.5	2
204443Z	★	BT40	32	12	45	90	45	63	15IP	1.4	2
204455Z	★	BT50	32	12	45	90	34	52	15IP	4	2

DIN 69893-HSK-A

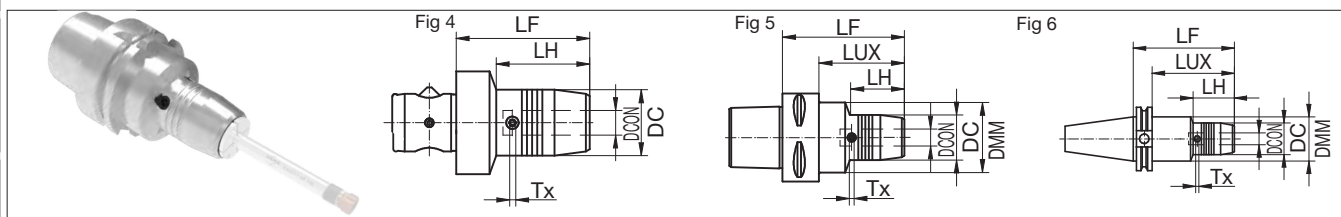
Dimensions (mm)

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
204054Z	★	HSK63	42	12	50	90	48	64	15IP	1.3	3
204064Z	★	HSK100	42	12	50	105	59	76	15IP	2.8	3

Solid

Indexable Head Type

Indexable Insert Type



ABS-H

Dimensions (mm)

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
204576Z	★	ABS50	42	20	—	75	58	—	15IP	0.9	4

DIN 26623-1-PSC (Polygon Shank)

Dimensions (mm)

Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
201846Z	★	PSC50	42	20	50	90	52	—	15IP	1.05	5
201856Z	★	PSC63	42	20	63	97	55	—	15IP	1.6	5

ASME B5.50-CAT-AD/B

Dimensions (mm)

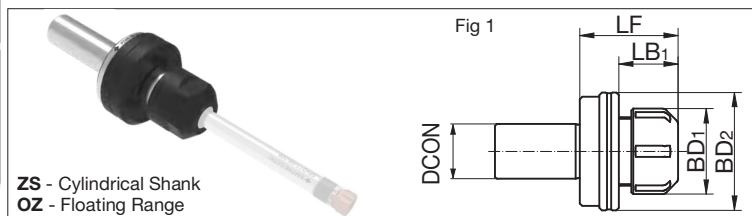
Cat. No.	Stock	Size	DC	DCON	DMM	LF	LH	LUX	Tx	Weight (kg)	Fig
203664Z	★	CAT40	32	12	45	102	42	83	15IP	2.0	6
204664Z	★	CAT50	32	12	70	102	42	83	15IP	2.7	6

Reamers

Brazed

Others

Floating Chuck for Lathes (ø7.600 to ø13.100)



ZS - Cylindrical Shank
OZ - Floating Range

Cylindrical Shaft DIN 1835-A

Dimensions (mm)

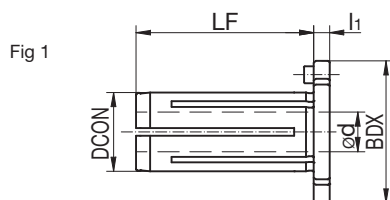
Cat. No.	Stock	Collet	DCON	Diameter Range	BD2	BD1	LF	OZ	Weight (kg)	Fig
PZ60-16-16-044	★	ER16	ZS 16	3.0 to 10.0	42	28	44	±1	0.3	1
PZ60-16-20-044	★		ZS 20	3.0 to 10.0	42	28	44	±1	0.3	1

★: Worldwide Warehouse Item

Recommended Tightening Torque (N·m)

SumiReamer Small SR - Accessories

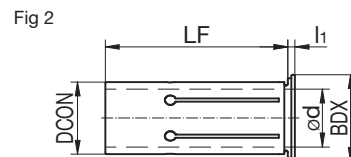
Carbon Steel Alloy Steel up to 0.28%
Carbon Steel Alloy Steel from 0.29%
Tempered Steel
Hardened Steel up to 45HRC
Stainless Steel
Cast Iron
Ductile Cast Iron
Aluminum Alloy
Copper Alloy



Reducers for Hydro Compensation Chuck

Dimensions (mm)

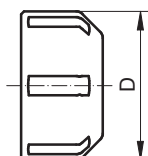
Cat. No.	Stock	Diameter BDX	Cap Dia. ød	DCON	Shoulder Length LF	l1	Fig
67-12-06	★	22	6	12	49	4	1
67-12-08	★	22	8	12	49	4	1



Reducers for Hydro Compensation Chuck "Schunk"

Dimensions (mm)

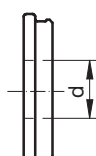
Cat. No.	Stock	Diameter BDX	Cap Dia. ød	DCON	Shoulder Length LF	l1	Fig
0207913	★	16.5	6	12	45	2	2
0207915	★	16.5	8	12	45	2	2
0207923	★	24.0	6	20	50.5	2	2
0207925	★	24.0	8	20	50.5	2	2



Collet Nut for Seal Disk

Dimensions (mm)

Cat. No.	Size	øD	Thread
20.107.210	ER16	28	M22 x 1.5
20.107.310	ER20	34	M25 x 1.5
20.107.410	ER25	42	M32 x 1.5
20.107.510	ER32	50	M40 x 1.5

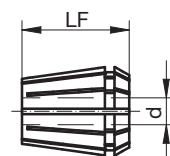


Seal Disk for Collet Nut

Dimensions (mm)

Cat. No.	Size	Diameter Range
20.107.21-□□□	ER16	3.0 to 10.0
20.107.31-□□□	ER20	3.0 to 13.0
20.107.41-□□□	ER25	3.0 to 16.0
20.107.51-□□□	ER32	3.0 to 20.0

□□□ = ød
Example 1: ER25, d=12 ⇒ 20.107.41-120;
Use ø12 to ø16mm for 20.107.41-□□□,
ø12 to ø20mm for 20.107.51-□□□
and ø12 to ø26mm for 20.107.61-□□□.
Stocked in increments of 1mm.



Collet

Dimensions (mm)

Cat. No.	Type	Diameter Range	LF
62-16-□□	ER16	3.0 to 10.0	27.5
62-20-□□	ER20	3.0 to 13.0	31.5
62-25-□□	ER25	3.0 to 16.0	35
62-32-□□	ER32	3.0 to 20.0	40

□□ = ød
Example 1: ER25, d=12 ⇒ 62-25-12
Use ø12 to ø16mm for 62-25-□□
ø12 to ø20mm for 62-32-□□
and ø12 to ø26mm for 62-40-□□.
Stocked in increments of 1mm.

Collet Nut Wrench

Cat. No.	Size
00-05-13	ER16
00-05-12	ER20
00-05-05	ER25
00-05-02	ER32



Spare Parts

Adjustment screw for "TENDOzero" hydraulic chuck	
9954676	

Coolant Tubes

Taper Size	
HSK63	H00-63-01
HSK100	H00-100-01

For the HSK arbor.

Run-Out Indicating Insert

Cat No.	System Size	Stock
SRSC08-06-02	SRS_08	★
SRSC10-06-02	SRS_10	★
SRSC11-06-03	SRS_11	★
SRSC13-06-03	SRS_13	★



Torque Wrench

Wrench Cat. No.	Torx Size	N·m	System Size	Stock
G00-40-15	T6	0.6	SRS_08	★
G00-40-14	T7	0.9	SRS_10	★
G00-40-16	T9	1.4	SRS_11	★
G00-40-17	T10	2.0	SRS_13	★

★: Worldwide Warehouse Item

Recommended Tightening Torque (N·m)

Drilling

Solid

Indexable Head Type

Indexable Insert Type

Reamers

Brazed

Others

Insert for SR Reamer

- SRG **General-Purpose** Straight Flute: Stop and Through Holes



Fig 1

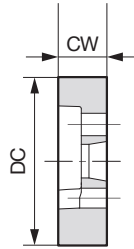
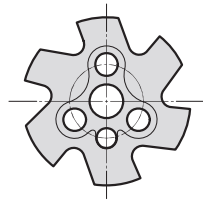
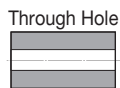
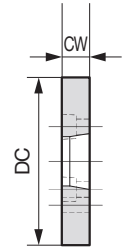
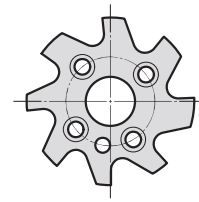
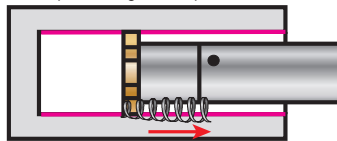


Fig 2



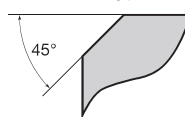
Conceptual Image of Chip Evacuation



Chips Evacuated Toward Front

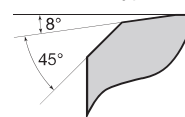
★: Worldwide Warehouse Item

A01 Type



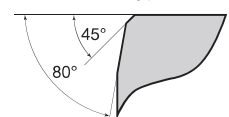
Standard Type

C01 Type



Good Surface Roughness

S02 Type



Good Straightness

SR Reamer Insert Identification

Specifying Inserts Using Workpiece Hole Diameter Tolerance

The actual desired reamer diameter will be on the upper limit side of the median work tolerance, and will differ depending on diameter/tolerance range/grade. Contact Sumitomo Engineering Department for more details.

SR G 18.2 + 20 - 10 - A01 - F05 12R 1

- | | |
|--|-------------------------|
| (1) SR Reamer | (5) Approach Angle Code |
| (2) G = Straight, L = Lefthand helix | (6) Grade Symbol |
| (3) Workpiece Bore Diameter (mm) | (7) Coating Code |
| (4) Tolerance (μm) +/- or standard (e.g. H7) | |

Specifying Inserts Using Desired Reamer Diameter

By adding a "Q" after the diameter, it is possible to specify exact desired reamer dimensions. Uncoated types are available within $\pm 2\mu$, thin-coated layer types are available within $\pm 3\mu$ and thick-coated layer types are available within $\pm 4\mu$.

SR L 18.2 Q + 3 - 3 - A01 - F05 12R 1

- | | |
|---|-------------------------|
| (1) SR Reamer | (5) Approach Angle Code |
| (2) G = Straight, L = Lefthand helix | (6) Grade Symbol |
| (3) Median Desired Cutting Edge Diameter (mm) | (7) Coating Code |
| (4) Tolerance (μm) +/- | |



Insert for SR Reamer

- SRL **Chip Evacuation Emphasized** Left-hand Flute: For Through Holes



Fig 1

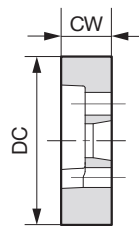
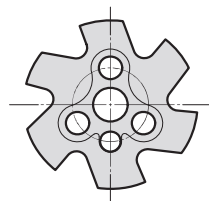
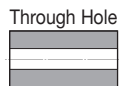
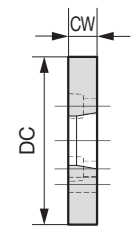
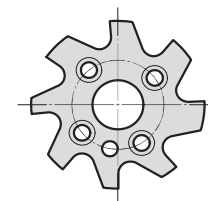
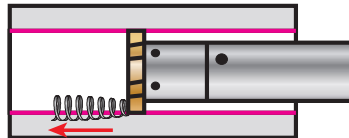


Fig 2

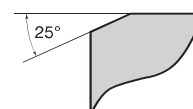


Conceptual Image of Chip Evacuation



Chips Evacuated Toward Back

B01 Type



For Steel Through Holes

Made-to-order items

Dimensions (mm)

Cutting Diameter DC	CW	Number of Teeth
ø11.900 to ø15.600	4.3	6
ø15.601 to ø18.600		
ø18.601 to ø23.600		
ø23.601 to ø28.600		
ø28.601 to ø35.600	4.3	8
ø35.601 to ø43.600		
ø43.601 to ø51.600		
ø51.601 to ø60.600		
ø60.601 to ø80.600	4.3	12
ø80.601 to ø100.600		
ø100.601 to ø120.600		
ø120.601 to ø140.600		

SRG (Special) and SRL (Special) are made-to-order items.

* Cermet grades (T1200A and T1212R1) are only available up to ø100.600 mm.

Recommended Cutting Conditions

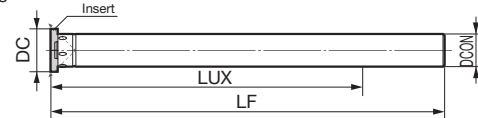
ISO	Part Material	Insert	Grade	Grade	Depth of Cut (a_p) (mm/radius)			Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)
					Below ø20	ø20 to ø35	ø35 and above		
P	Carbon Steel	SRG	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	80 to 220	0.10 to 0.25
		SRL	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	100 to 220	0.15 to 0.35
		SRG	T1200A	Cermet	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	120 to 250	0.10 to 0.25
		SRL	T1200A	Cermet	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	120 to 250	0.15 to 0.35
	Alloy Steel	SRG	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	60 to 180	0.06 to 0.20
		SRL	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	60 to 180	0.10 to 0.22
		SRG	T1200A	Cermet	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	70 to 200	0.08 to 0.20
		SRL	T1200A	Cermet	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	70 to 200	0.12 to 0.25
M	Die Steel	SRG	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.10	0.08 to 0.15	0.10 to 0.20	15 to 60	0.06 to 0.20
	Tool Steels	SRG	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.10	0.08 to 0.15	0.10 to 0.20	15 to 30	0.04 to 0.15
M	Stainless Steel	SRG	F0512R1	Micro-grained Carbide + PVD	0.05 to 0.10	0.08 to 0.15	0.08 to 0.20	15 to 60	0.06 to 0.20
K	Cast Iron	SRG	F0514R2	Coated Carbide	0.05 to 0.18	0.08 to 0.20	0.10 to 0.25	80 to 250	0.10 to 0.30
	Ductile Cast Iron	SRG	F0514R2	Coated Carbide	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	80 to 250	0.10 to 0.30
N	Non-ferrous Alloys	SRG	F0510C	Micro-grained Carbide + DLC	0.05 to 0.12	0.08 to 0.15	0.10 to 0.25	250 to 500	0.10 to 0.30

★: Worldwide Warehouse Item



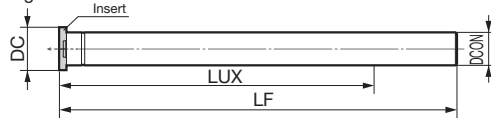
• SRD (Through Hole)

Fig 1



• SRB (Stop Hole)

Fig 2



Holder (ø11.900 to 35.600mm)

Dimensions (mm)

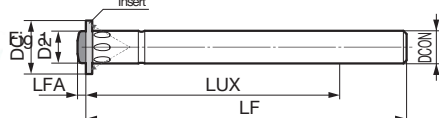
	Dia. DC Range	Holder Cat. No.												Shank Dia. DCON	Overall Length LF	Usable Length LUX	Group No.	
		SRD			SRB			Carbide Shank SRD		Carbide Shank SRB								
		Stock	Cat. No.	Fig	Stock	Cat. No.	Fig	Stock	Cat. No.	Fig	Stock	Cat. No.	Fig					
Short	ø11.900 to ø15.600	★	SRD16-10-100	1	★	SRB16-10-100	2		—	1		—	2	10	100	60	(1)	0.9
	ø15.601 to ø18.600	★	SRD19-12-115	1	★	SRB19-12-115	2		—	1		—	2	12	115	70	(1)	0.9
	ø18.601 to ø23.600	★	SRD24-16-128	1	★	SRB24-16-128	2		—	1		—	2	16	128	80	(2)	1.5
	ø23.601 to ø28.600	★	SRD29-20-145	1	★	SRB29-20-145	2		—	1		—	2	20	145	95	(2)	1.5
	ø28.601 to ø35.600	★	SRD36-25-170	1	★	SRB36-25-170	2		—	1		—	2	25	170	110	(2)	1.5
Long	ø11.900 to ø15.600	★	SRD16-10-160	1	★	SRB16-10-160	2	★	SRD16-10-160HM	1	★	SRB16-10-160HM	2	10	160	120	(1)	0.9
	ø15.601 to ø18.600	★	SRD19-12-185	1	★	SRB19-12-185	2	★	SRB19-12-185HM	1	★	SRB19-12-185HM	2	12	185	140	(1)	0.9
	ø18.601 to ø23.600	★	SRD24-16-208	1	★	SRB24-16-208	2	★	SRB24-16-208HM	1	★	SRB24-16-208HM	2	16	208	160	(2)	1.5
	ø23.601 to ø28.600	★	SRD29-20-240	1	★	SRB29-20-240	2	★	SRB29-20-240HM	1	★	SRB29-20-240HM	2	20	240	190	(2)	1.5
	ø28.601 to ø35.600	★	SRD36-25-274	1	★	SRB36-25-274	2	★	SRB36-25-274HM	1	★	SRB36-25-274HM	2	25	274	214	(2)	1.5

SD (Center Bolt Clamp)

- Can be clamped using one center bolt to improve work efficiency
- Applicable to high-torque (high-load) machining

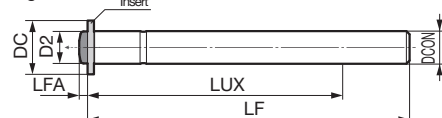
• SRD-SD (Through Hole)

Fig 1



• SRB-SD (Stop Hole)

Fig 2



Steel Shank Holder SRD-SD/SRB-SD (Center Bolt Clamp)

Dimensions (mm)

Dia. DC Range		Holder Cat. No.						Shank Dia. DCON	Overall Length LF	Usable Length LUX	Bolt D2	Bolt LFA	Group No.		
		SRD (Through Hole)			SRB (Stop Hole)								SRD	SRB	
		Stock	Cat. No.	Fig	Stock	Cat. No.	Fig								
Short	ø11.900 to ø15.600	★	SRD16-10-100SD	1	★	SRB16-10-100SD	2	10	100	60	9.8	2.5	(3)	(3)	4.0
	ø15.601 to ø18.600	★	SRD19-12-115SD	1	★	SRB19-12-115SD	2	12	115	70	11.8	3.0	(4)	(7)	6.0
	ø18.601 to ø23.600	★	SRD24-16-128SD	1	★	SRB24-16-128SD	2	16	128	80	15.8	4.0	(5)	(8)	16.0
	ø23.601 to ø28.600	★	SRD29-20-145SD	1	★	SRB29-20-145SD	2	20	145	95	15.8	4.0	(5)	(8)	16.0
	ø28.601 to ø35.600	★	SRD36-25-170SD	1	★	SRB36-25-170SD	2	25	170	110	24.5	4.0	(6)	(9)	18.0
Long	ø11.900 to ø15.600	★	SRD16-10-160SD	1	★	SRB16-10-160SD	2	10	160	120	9.8	2.5	(3)	(3)	4.0
	ø15.601 to ø18.600	★	SRD19-12-185SD	1	★	SRB19-12-185SD	2	12	185	140	11.8	3.0	(4)	(7)	6.0
	ø18.601 to ø23.600	★	SRD24-16-208SD	1	★	SRB24-16-208SD	2	16	208	160	15.8	4.0	(5)	(8)	16.0
	ø23.601 to ø28.600	★	SRD29-20-240SD	1	★	SRB29-20-240SD	2	20	240	190	15.8	4.0	(5)	(8)	16.0
	ø28.601 to ø35.600	★	SRD36-25-274SD	1	★	SRB36-25-274SD	2	25	274	214	24.5	4.0	(6)	(9)	18.0

Carbide Shank Holder SRD-SD/SRB-SD (Center Bolt Clamp)

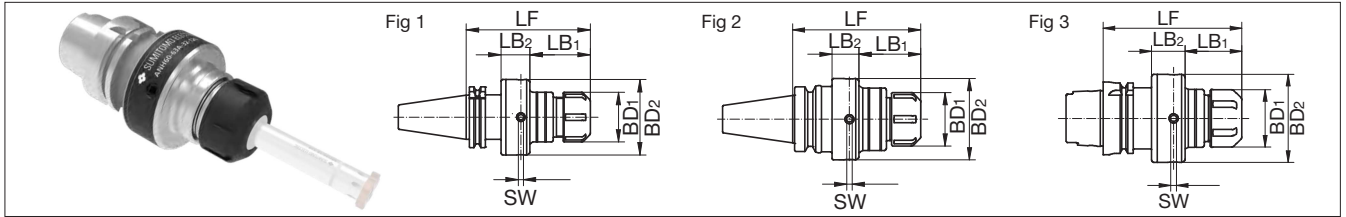
Dimensions (mm)

Dia. DC Range		Holder Cat. No.						Shank Dia. DCON	Overall Length LF	Usable Length LUX	Bolt D2	Bolt LFA	Group No.		
		SRD (Through Hole)			SRB (Stop Hole)								SRD	SRB	
		Stock	Cat. No.	Fig	Stock	Cat. No.	Fig								
Long	ø11.900 to ø15.600	★	SRD16-10-160HMSD	1	★	SRB16-10-160HMSD	2	10	160	120	9.8	2.5	(3)	(3)	4.0
	ø15.601 to ø18.600	★	SRD19-12-185HMSD	1	★	SRB19-12-185HMSD	2	12	185	140	11.8	3.0	(4)	(7)	6.0
	ø18.601 to ø23.600	★	SRD24-16-208HMSD	1	★	SRB24-16-208HMSD	2	16	208	160	15.8	4.0	(5)	(8)	16.0
	ø23.601 to ø28.600	★	SRD29-20-240HMSD	1	★	SRB29-20-240HMSD	2	20	240	190	15.8	4.0	(5)	(8)	16.0
	ø28.601 to ø35.600	★	SRD36-25-274HMSD	1	★	SRB36-25-274HMSD	2	25	274	214	24.5	4.0	(6)	(9)	18.0

★: Worldwide Warehouse Item

N·m Recommended Tightening Torque (N·m)

Compensation Collet Chuck



DIN 69871-AD

Dimensions (mm)

Cat. No.	Stock	Size	Type	Diameter Range	BD1	BD2	LF	LB1	LB2	SW	Weight (kg)	Fig
AND60-40A-32-120	★	SK 40	ER32	3.0 to 20.0	50	76	120	56	29	5	2.2	1
AND60-40A-40-135	★	SK 40	ER40	3.0 to 30.0	63	76	135	68	32	5	2.2	1
AND60-50A-32-120	★	SK 50	ER32	3.0 to 20.0	50	76	120	61	24	5	4.1	1
AND60-50A-40-135	★	SK 50	ER40	3.0 to 30.0	63	76	135	76	24	5	4.2	1

MAS-BT JIS 6339-AD

Dimensions (mm)

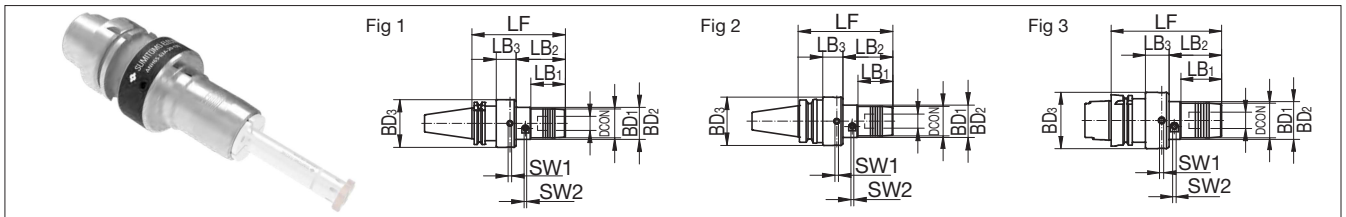
Cat. No.	Stock	Size	Type	Diameter Range	BD1	BD2	LF	LB1	LB2	SW	Weight (kg)	Fig
ANT60-40A-32-120	★	BT 40	ER32	3.0 to 20.0	50	76	120	54	29	5	2.2	2
ANT60-40A-40-135	★	BT 40	ER40	3.0 to 30.0	63	75	135	66	32	5	2.3	2
ANT60-50A-40-120	★	BT 50	ER32	3.0 to 30.0	50	76	120	58	24	5	4.5	2
ANT60-50A-40-135	★	BT 50	ER40	3.0 to 30.0	63	76	135	73	24	5	4.5	2

DIN 69893-HSK-A

Dimensions (mm)

Cat. No.	Stock	Size	Type	Diameter Range	BD1	BD2	LF	LB1	LB2	SW	Weight (kg)	Fig
ANH60-63A-32-120	★	HSK 63	ER32	3.0 to 20.0	50	76	120	49	29	5	2	3
ANH60-63A-40-135	★	HSK 63	ER40	3.0 to 30.0	63	76	135	64	29	5	1.9	3
ANH60-100A-32-120	★	HSK 100	ER32	3.0 to 20.0	50	76	120	67	24	5	3.4	3
ANH60-100A-40-135	★	HSK 100	ER40	3.0 to 30.0	63	76	135	82	24	5	3.3	3

Compensation Hydro Chuck



DIN 69871-AD

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	BD3	LF	LB1	LB2	LB3	SW1	SW2	Weight (kg)	Fig
AND65-40A-20-135	★	SK 40	20	42	46	69	135	50	71	29	5	4	2.5	1
AND65-40A-32-180	★	SK 40	32	62	-	88	180	111	-	34	6	6	3.8	1
AND65-50A-20-160	★	SK 50	20	42	46	69	160	70	92	34	5	4	5	1
AND65-50A-32-180	★	SK 50	32	62	-	88	180	111	-	34	6	6	6.4	1

MAS-BT JIS 6339-AD

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	BD3	LF	LB1	LB2	LB3	SW1	SW2	Weight (kg)	Fig
ANT65-40A-20-135	★	BT 40	20	42	46	69	135	50	71	29	5	4	2.5	2
ANT65-40A-32-180	★	BT 40	32	62	-	88	180	111	-	34	6	6	3.9	2
ANT65-50A-20-135	★	BT 50	20	42	46	69	135	50	73	24	5	4	4.8	2
ANT65-50A-32-180	★	BT 50	32	62	-	88	180	116	-	26	6	6	6.5	2

DIN 69893-HSK-A

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	BD3	LF	LB1	LB2	LB3	SW1	SW2	Weight (kg)	Fig
ANH65-63A-20-135	★	HSK 63	20	42	46	69	135	50	64	29	5	4	2.2	3
ANH65-63A-32-180	★	HSK 63	32	62	-	88	180	104	-	34	6	6	4.2	3
ANH65-100A-20-135	★	HSK 100	20	42	46	69	135	50	82	24	5	4	3.4	3
ANH65-100A-32-180	★	HSK 100	32	62	-	88	165	110	-	26	6	6	4.9	3

Adjustment Screws

Dia. DCON	
12	C00-03-44
20	C00-03-44
32	C00-03-45

Coolant Tubes

Taper Size	
HSK40	H00-40-01
HSK63	H00-63-01
HSK100	H00-100-01

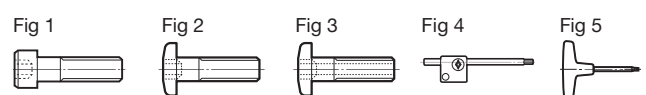
For the HSK arbor.

Torque Wrench

Wrench Cat. No.	Applicable Holder Cat. No.	Torx Size	Alt. in stock (N·m)
G00-40-11	SR 16 / SR 19	T6	0.9
G00-40-12	SR 24 - SR 61	T8	1.5
G00-40-13	SR 81 / SR 141	T15	3.5

↑ D,B,KG,A

★: Worldwide Warehouse Item

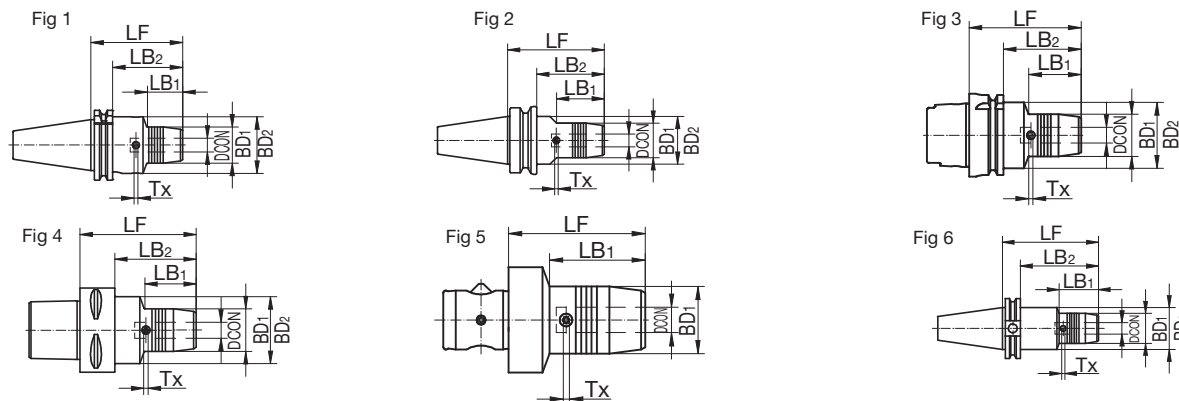


Cap Screws and Wrenches

Group No.	Cap Screw	Fig	Wrench	Fig	Torx Size	N·m
(1)	C00-90-00	1	G00-20-01	4	T 6	0.9
(2)	C00-90-01	1	G00-20-02	4	T 8	1.5
(3)	C00-90-22	2	G00-20-27	5	T15	4.0
(4)	C00-90-23	2	G00-20-28	5	T20	6.0
(5)	C00-90-24	2	G00-20-29	5	T30	16.0
(6)	C00-90-25	2	G00-20-29	5	T30	18.0
(7)	C00-90-23B	3	G00-20-28	5	T20	6.0
(8)	C00-90-24B	3	G00-20-29	5	T30	16.0
(9)	C00-90-25B	3	G00-20-29	5	T30	18.0

⌚ Recommended Tightening Torque (N·m)

Schunk "TENDOzero" Compensating Hydraulic Chuck



DIN 69871-AD/B

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Tx	Weight (kg)	Fig
1447893	★	SK40	20	42	50	81	34	62	15IP	1.4	1
1447946	★	SK40	32	63	80	81	26	62	15IP	2	1
204246Z	★	SK50	20	42	50	81	34	62	15IP	3.3	1
204247Z	★	SK50	32	64	70	104	63	84	15IP	4.4	1

MAS-BT JIS 6339-AD/B

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Tx	Weight (kg)	Fig
205636Z	★	BT30	20	42	45	90	48	63	15IP	1.5	2
204445Z	★	BT40	20	42	45	90	48	63	15IP	1.5	2
204457Z	★	BT50	20	42	45	90	34	52	15IP	4	2
204458Z	★	BT50	32	64	70	120	63	82	15IP	5.3	2

DIN 69893-HSK-A

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Tx	Weight (kg)	Fig
204056Z	★	HSK63	20	42	50	90	48	64	15IP	1.3	3
204057Z	★	HSK63	25	57	63	120	59	94	15IP	2.2	3
204058Z	★	HSK63	32	64	75	125	63	99	15IP	2.7	3
204066Z	★	HSK100	20	20	50	105	59	76	15IP	2.8	3
204067Z	★	HSK100	25	25	63	110	62	81	15IP	2.8	3
204068Z	★	HSK100	32	32	75	110	62	81	15IP	3.8	3

*Coolant tube not included

DIN 26623-1-PSC

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Tx	Weight (kg)	Fig
201846Z	★	PSC50	20	42	50	90	52	-	15IP	1.05	4
201856Z	★	PSC63	20	42	63	97	55	-	15IP	1.6	4
201858Z	★	PSC63	32	63	63	110	62	-	15IP	2.8	4

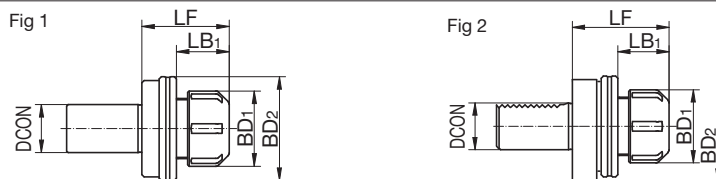
ABS-H Type

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Tx	Weight (kg)	Fig
204576Z	★	ABS50	20	42	-	75	58	-	15IP	0.9	5

ASME B5.50-CAT-AD/B

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Tx	Weight (kg)	Fig
203666Z	★	CAT40	20	38	45	102	50	83	15IP	2	6
204666Z	★	CAT50	20	42	70	102	50	83	15IP	2.8	6
204668Z	★	CAT50	32	64	70	102	65	83	15IP	4.1	6

Floating Chuck for Lathes (ø11.900 to ø35.600mm)



ZS - Cylindrical Shank
OZ - Floating Range

Cylindrical Shaft DIN 1835-A

Dimensions (mm)

Cat. No.	Stock	Shank	Type	Diameter Range	BD1	BD2	DCON	LF	LB1	OZ	Fig
PZ60-25-20-053	★	ZS 20	ER25	3.0 to 16.0	42	57	20	53	26	±1	1
PZ60-32-25-058	★	ZS 25	ER32	3.0 to 20.0	50	69	25	58	27	±1.5	1
PZ60-40-25-064	★	ZS 25	ER40	3.0 to 26.0	63	79	25	64	33	±1.5	1
PZ60-32-32-058	★	ZS 32	ER32	3.0 to 20.0	50	69	32	58	27	±1.5	1
PZ60-40-32-064	★	ZS 32	ER40	3.0 to 26.0	63	79	32	64	33	±1.5	1

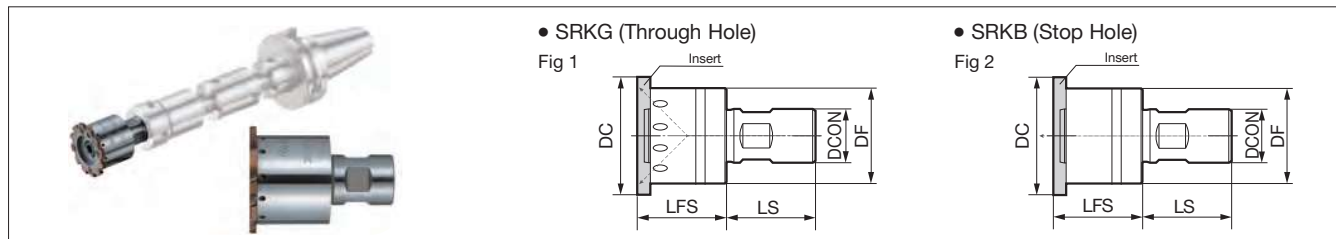
DIN 69880-VDI

Dimensions (mm)

Cat. No.	Stock	Shank	Type	Diameter Range	BD1	BD2	DCON	LF	LB1	OZ	Fig
PV60-25-20-057	★	VDI 20	ER25	3.0 to 16.0	42	57	20	57	26	±1	2
PV60-25-30-064	★	VDI 30	ER25	3.0 to 16.0	42	68	30	64	26	±1	2
PV60-25-30-072	★	VDI 30	ER32	3.0 to 20.0	50	68	30	72	27	±1.5	2
PV60-32-40-074	★	VDI 40	ER32	3.0 to 20.0	50	83	40	74	27	±1.5	2
PV60-40-40-074	★	VDI 40	ER40	3.0 to 26.0	63	83	40	74	33	±1.5	2

★: Worldwide Warehouse Item

Insert Holders



Head (ø35.601 to 140.6mm)

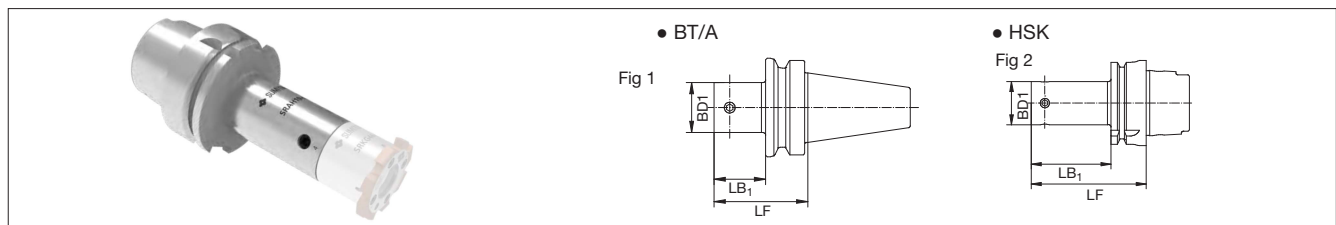
Cap Screws and Wrench

Dimensions (mm)

Dia. DC Range	Holder Cat. No.						Diameter DF	Shank Dia. DCON	Length LFS	Shank LS	Insert Screws		Center Assembly Bolt		
	Stock	SRKG	Fig	Stock	SRKB	Fig							Cap Screw		Tightening Torque
													SRKG	SRKB	
ø35.601 to ø43.600	★	SRKG44-32-18-030	1	★	SRKB44-32-18-030	2	32	18	30	30	C00-90-02 (4x)	1.5	C00-26-23	C00-26-23B	Refer to page 164 for assembly instructions, and recommended torque specifications.
ø43.601 to ø51.600	★	SRKG52-39-20-035	1	★	SRKB52-39-20-035	2	39	20	35	30	C00-90-02 (5x)	1.5	C00-26-38	C00-26-38B	
ø51.601 to ø60.600	★	SRKG61-46-25-040	1	★	SRKB61-46-25-040	2	46	25	40	35	C00-90-02 (5x)	1.5	C00-24-26	C00-24-26B	
ø60.601 to ø80.600	★	SRKG81-56-32-050	1	★	SRKB81-56-32-050	2	56	32	50	40	C00-90-04 (4x)	3.5	C00-26-37	C00-26-37B	
ø80.601 to ø100.600	★	SRKG101-76-40-060	1	★	SRKB101-76-40-060	2	76	40	60	50	C00-90-04 (4x)	3.5	C00-24-31	C00-24-31B	
ø100.601 to ø120.600	★	SRKG121-76-40-060	1	★	SRKB121-76-40-060	2	76	40	60	50	C00-90-04 (8x)	3.5	C00-24-31	C00-24-31B	
ø120.601 to ø140.600	★	SRKG141-76-40-060	1	★	SRKB141-76-40-060	2	76	40	60	50	C00-90-04 (8x)	3.5	C00-24-31	C00-24-31B	

*Refer to the table at the bottom of page 11 for the catalog numbers of cap screws and wrenches applicable for each product. *: For SRKG **: For SRKB

Adaptors (with Integrated Compensation Device)



DIN 69871-AD

Dimensions (mm)

DIN 69871-B

Dimensions (mm)

Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SRAD10-40A-44-065	★	SK40	32	65	46	1.1	1
SRAD10-40A-52-065	★	SK40	39	65	46	1.2	1
SRAD10-40A-61-075	★	SK40	46	75	56	1.4	1
SRAD10-40A-81-080	★	SK40	56	80	61	1.6	1
SRAD10-40A-101-095	★	SK40	76	95	76	2.2	1
SRAD10-50A-44-065	★	SK50	32	65	46	2.9	1
SRAD10-50A-52-065	★	SK50	39	65	46	3.0	1
SRAD10-50A-61-075	★	SK50	46	75	56	3.2	1
SRAD10-50A-81-085	★	SK50	56	85	66	3.6	1
SRAD10-50A-101-095	★	SK50	76	95	76	4.6	1

Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SRAD10-40B-44-065	★	SK40	33	65	33	1.1	1
SRAD10-40B-52-065	★	SK40	38	65	38	1.3	1
SRAD10-40B-61-075	★	SK40	43	75	43	1.4	1
SRAD10-40B-81-080	★	SK40	53	80	56	1.7	1
SRAD10-40B-101-095	★	SK40	-	95	76	2.5	1
SRAD10-50B-44-065	★	SK50	27	65	32	3.7	1
SRAD10-50B-52-065	★	SK50	27	65	39	3.8	1
SRAD10-50B-61-075	★	SK50	37	75	46	4.0	1
SRAD10-50B-81-085	★	SK50	47	85	56	4.3	1
SRAD10-50B-101-095	★	SK50	57	95	76	5.1	1

MAS-BT JIS 6339-AD

DIN 69893-HSK-A

Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SRAT10-40A-44-060	★	BT40	32	60	33	1.1	1
SRAT10-40A-52-065	★	BT40	39	65	38	1.3	1
SRAT10-40A-61-070	★	BT40	46	70	43	1.4	1
SRAT10-40A-81-080	★	BT40	56	80	53	1.7	1
SRAT10-40A-101-095	★	BT40	76	95	-	2.5	1
SRAT10-50A-44-065	★	BT50	32	65	27	3.7	1
SRAT10-50A-52-065	★	BT50	39	65	27	3.8	1
SRAT10-50A-61-075	★	BT50	46	75	37	4.0	1
SRAT10-50A-81-085	★	BT50	56	85	47	4.3	1
SRAT10-50A-101-095	★	BT50	76	95	57	5.1	1

Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SRAH10-63A-44-085	★	HSK63	32	85	59	1.0	2
SRAH10-63A-52-090	★	HSK63	39	90	64	1.2	2
SRAH10-63A-61-100	★	HSK63	46	100	74	1.5	2
SRAH10-63A-81-105	★	HSK63	56	105	79	1.8	2
SRAH10-63A-101-120	★	HSK63	76	120	94	2.4	2
SRAH10-100A-44-090	★	HSK100	32	90	61	2.3	2
SRAH10-100A-52-095	★	HSK100	39	95	66	2.6	2
SRAH10-100A-61-100	★	HSK100	46	100	71	2.8	2
SRAH10-100A-81-120	★	HSK100	56	120	91	3.5	2
SRAH10-100A-101-130	★	HSK100	76	130	101	5.0	2

*Coolant tube is not included

Coolant Tubes

Taper Size	
HSK40	H00-40-01
HSK63	H00-63-01
HSK100	H00-100-01

★: Worldwide Warehouse Item

• System Holders Beta Modular - Ø 139.801 - 200.200 mm

Drilling

J

Solid

Indexable
Head Type

Indexable
Insert Type

Reamers

Brazed

Others

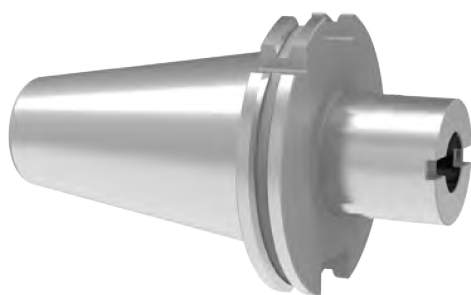


Fig. 1

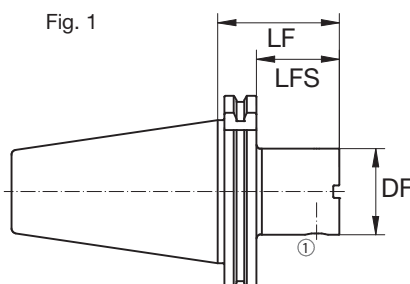
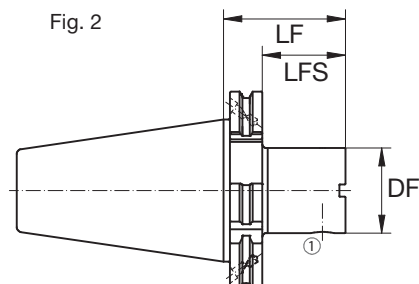


Fig. 2



System Holders Beta Modular - DIN 69871-AD

Spare Parts Dimensions (mm)

Size	Beta	Stock	Cat. No.	Fig	Diameter DF	Length LFS	Length LF	Shank Dia.	Weight (lbs)	Clamping Screw
SK50	63	★	BD10-50A-63-060	1	63	41	60	BM-63	7.27	Z00-63-24
	80	★	BD10-50A-80-070	1	80	51	70	BM-80	8.82	Z00-80-24
	100	★	BD10-50A-100-115	1	100	96	115	BM-100	15.21	Z00-100-24

System Holders Beta Module - DIN 69871-B

Spare Parts Dimensions (mm)

Size	Beta	Stock	Cat. No.	Fig	Diameter DF	Length LFS	Length LF	Shank Dia.	Weight (lbs)	Clamping Screw
SK50	63	★	BD10-50B-63-060	2	63	41	60	BM-63	7.27	Z00-63-24
	100	★	BD10-50B-100-115	2	100	96	115	BM-100	15.21	Z00-100-24

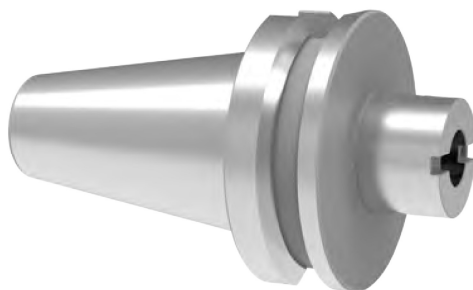


Fig. 1

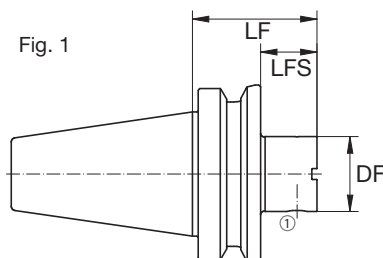
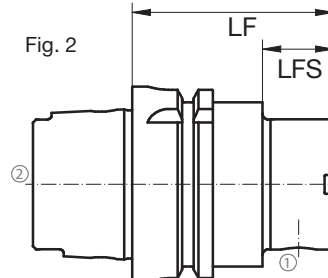


Fig. 2



System Holders Beta Modular - MAS-BT JIS 6339-AD

Spare Parts Dimensions (mm)

Size	Beta	Stock	Cat. No.	Fig	Diameter DF	Length LFS	Length LF	Shank Dia.	Weight (lbs)	Clamping Screw
BT50	63	★	BT10-50A-63-080	1	63	42	80	BM-63	9.47	Z00-63-24
	80	★	BT10-50A-80-100	1	80	62	100	BM-80	12.12	Z00-80-24
	100	★	BT10-50A-100-110	1	100	72	110	BM-100	15.43	Z00-100-24

System Holders Beta Module - DIN 69893-HSK-A

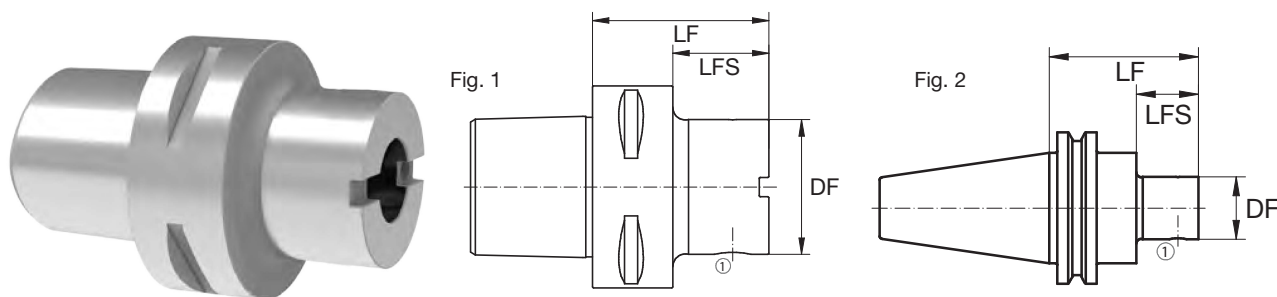
Spare Parts Dimensions (mm)

Size	Beta	Stock	Cat. No.	Fig	Diameter DF	Length LFS	Length LF	Shank Dia.	Weight (lbs)	Clamping Screw	Coolant Tube
HSK100	63	★	BH10-100A-63-080*	2	63	35	80	BM-63	9.47	Z00-63-24	H00-63-01
	80	★	BH10-100A-80-090*	2	80	45	90	BM-80	12.12	Z00-80-24	—
	100	★	BH10-100A-100-100*	2	100	55	100	BM-100	15.43	Z00-100-24	H00-100-01

* Coolant tube is not included

★: worldwide warehouse item

• System Holders Beta Modular - Ø 139.801 - 200.200 mm



System Holders Beta Modular - ISO 26623-1-PSC

Spare Parts Dimensions (mm)

Size	Beta	Stock	Cat. No.	Fig	Diameter DF	Length LFS	Length LF	Shank Dia.	Weight (lbs)	Clamping Screw
PSC63	63	★	C10-63-63-065	1	63	40	65	BM-63	3.30	Z00-63-24

System Holders Beta Module - ASME B5.50-CAT-AD

Spare Parts Dimensions (mm)

Size	Beta	Stock	Cat. No.	Fig	Diameter DF	Length LFS	Length LF	Shank Dia.	Weight (lbs)	Clamping Screw
CAT50	63		C6U4-B063	2	63	30	65	BM-63	6.61	Z00-63-24
	80		C6U4-B080	2	80	40	75	BM-80	7.27	Z00-80-24
	100		C6U4-B100	2	100	106	125	BM-100	9.92	Z00-100-24

★: worldwide warehouse item

• **Modular Holders - Ø 139.801 - 200.200 mm**

Drilling

✓

Solid

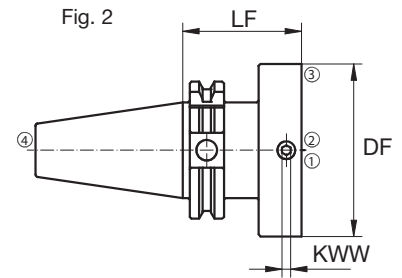
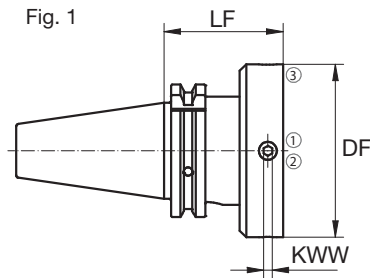
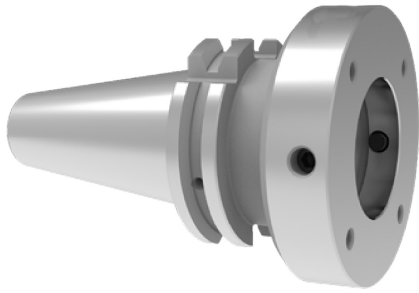
Indexable
Head Type

Indexable
Insert Type

Reamers

Brazed

Others



Modular Holders - DIN 69871-AD/B

Spare Parts

Dimensions (mm)

Size	Stock	Cat. No.	Fig	Diameter DF	Length LF	Width KWW	Treaded Pin M10x 20	Wrench	Cyl. Screw
SK50	★	AD10-50AB-100 060	1	100	60	5	C00-03-28	G00-02-06	C00-22-15
	★	AD10-50AB-117 060	1	117	60	5			C00-22-15
	★	AD10-50AB-140 060	1	140	60	5			C00-22-64

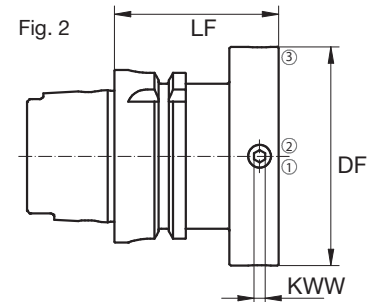
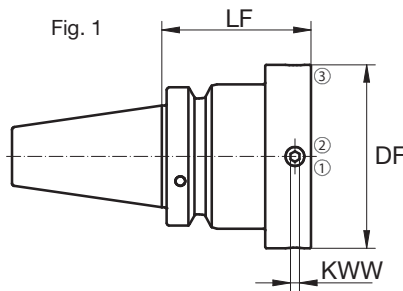
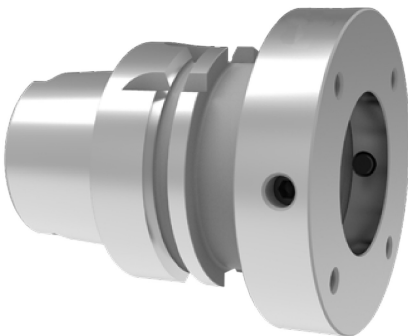
Modular Holders - ASME B5.50-CAT-AD/B*

Spare Parts

Dimensions (mm)

Size	Stock	Cat. No.	Fig	Diameter DF	Length LF	Width KWW	Treaded Pin M10x 20	Wrench	Cyl. Screw
CAT50	★	AC10-50AB-100-060	2	100	60	5	C00-03-28	G00-02-06	C00-22-15
	★	AC10-50AB-117-060	2	117	60	5			C00-22-15
	★	AC10-50AB-140-060	2	140	60	5			C00-22-64

*Requires retention knob with metric thread



Modular Holders - MAS-BT JIS 6339-AD/B

Spare Parts

Dimensions (mm)

Size	Stock	Cat. No.	Fig	Diameter DF	Length LF	Width KWW	Treaded Pin M10x 20	Wrench	Cyl. Screw
BT50	★	AT10-50AB-100-070	2	100	70	5	C00-03-28	G00-02-06	C00-22-15
	★	AT10-50AB-117-080	2	117	80	5			C00-22-15
	★	AT10-50AB-140-080	2	140	80	5			C00-22-64

Modular Holders - DIN 69893-HSK-A

Spare Parts

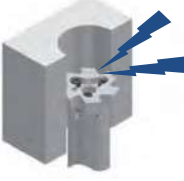
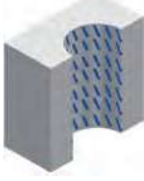
Dimensions (mm)

Size	Stock	Cat. No.	Fig	Diameter DF	Length LF	Width KWW	Treaded Pin M10x 20	Wrench	Cyl. Screw	Coolant Tube HSK100
HSK63	★	AH10-63A-100-065*	2	100	65	5	C00-03-28	G00-02-06	C00-22-15	H00-100-01
HSK100	★	AH10-100A-80-055*	2	80	55	4			—	
HSK100	★	AH10-100A-100-065*	2	100	65	5			C00-22-15	
HSK100	★	AH10-100A-117-065*	2	117	65	5			C00-22-15	
HSK100	★	AH10-100A-140-075*	2	140	75	5			C00-22-64	

* Coolant tube is not included

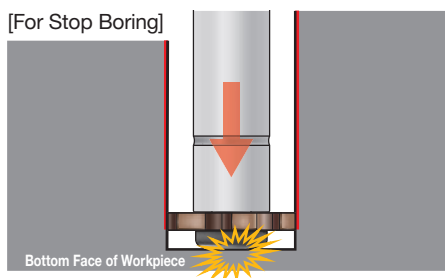
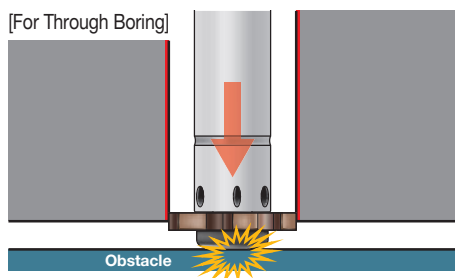
★: worldwide warehouse item

■ Troubleshooting

Failure	Countermeasures	Failure	Countermeasures
Enlarged Diameter 	- Reduce the runout as much as possible (use a holder with a diameter correction mechanism). - Decrease the cutting speed. - Increase the feed rate. - Increase the coolant concentration. - Reduce the stock removal. - Check the cutting edge for damage (whether there are built-up edges). - Change the reamer diameter.	Return Mark 	- Reduce the runout as much as possible (use a holder with a diameter correction mechanism). - Check the cutting edge for damage (whether there are built-up edges). - Reduce the stock removal. - Change to an insert with a sharper cutting edge shape. - Decrease the return (lifting) feed.
Tapered Hole 	- Reduce the runout as much as possible (use a holder with a diameter correction mechanism). - Decrease the cutting speed. - Decrease the feed rate. - Adjust the coolant concentration. - Review the pre-machining process. - Review the clamping method of the workpiece. - Compare the hole diameters when the workpiece is clamped and when it is unclamped. - Check and correct the direction of chip evacuation.	Irregular Cutting Noise 	- Decrease the coolant concentration. - Increase the stock removal. - Check the cutting edge for damage. - Change the approach angle of the insert cutting edge.
Chatter marks on machined surface 	- Reduce the runout as much as possible (use a holder with a diameter correction mechanism). - Change the approach angle of the insert cutting edge. - Review the clamping method of the workpiece. - Decrease the cutting speed. - Increase the feed rate.	Small Work Diameter 	- Replace the insert. - Decrease the coolant concentration. - Increase the stock removal. - Increase the cutting speed. - Decrease the feed rate.
Poor Surface Roughness 	- Check the cutting edge for damage. - Reduce the runout as much as possible (use a holder with a diameter correction mechanism). - Check whether the cutting conditions are within the recommended range. - Change to internal coolant supply. - Increase the coolant concentration.		

● Precautions for SD (Center Bolt Clamp)

This product can be used for both through-hole and stop-hole boring. However, the head of the center bolt protrudes from the end of the body, so ensure clearance by referring to the protrusion of the center bolt (LFA) shown in the dimension table.



SumiReamer SR - Large

■ SR Reamer Usage Instructions (Adjusting Runout)

The runout at the cutting edge of a reamer should be zero to obtain optimum boring precision. To correct runout in the holder or the machine's spindle, use of holders with a runout adjustment mechanism, hydro chucks and shrink-fitting is recommended. Various methods can be used to measure runout on a SumiReamer SR Reamer. With good runout repeatability, it is recommended that inserts be replaced without removing the shank holder from the spindle.

● Runout Adjustment

Procedure:

1. Secure central clamping screw according to value "A" in the table (if no value is listed use value "B").
2. Load the tool into the machine spindle.
3. Set the indicator (with 1 μm / .0001 inch resolution on the marked run out ① area on the shank.
4. Measure run-out of the two adjustment screw ② axes.
Compensate half the value of the total run-out error by using the adjustment screws. Check run out on all four axis points and repeat the adjustment if necessary. Tighten all adjusting screws, and verify run-out of .005 mm / .0002" T.I.R. or less.
5. Tighten the central clamping screw according to the value in table "B".
6. Check the run out again and readjust if necessary.



For Reaming Diameters larger than 36.601 mm

Procedure

1. Secure central clamping screw according to value "A" in the table (if no value is listed use value "B").
2. Load the tool into the machine spindle.
3. Set the indicator (with 1 μm / .0001 inch resolution) on the marked run out area ① on the shank.
4. Measure run-out of the two adjustment screw ② axes.
Compensate half the value of the total run-out error by using the adjustment screws. Check run out on all four axis points and repeat the adjustment if necessary. Tighten all adjusting screws, and verify run-out of .005 mm / .0002" T.I.R. or less.
5. Tighten the central clamping screw according to the value in table "B".
6. Check the run out again and readjust if necessary.

Recommended Tightening Torque for Center Locking Screw (N·m)

Holder Size	Cap Screw	Size	A	B
SRK □44	C00-26-23G/B	M8×60	25	32
SRK □52	C00-26-38G/B	M8×70	25	32
SRK □61	C00-24-26G/B	M10×80	40	55
SRK □81	C00-26-37G/B	M12×100	65	85
SRK □101	C00-24-31G/B	M16×100	95	120

↑ G, B

SR Parameter	A [Nm]	B [Nm]
SR 044	-	35
SR 052	-	35
SR 061	-	55
SR 081	60	85
SR 101	70	120
SR 121	70	120
SR 141	70	120

