



SUMITOMO

CARBIDE - CBN - DIAMOND

Tooling News E-187

SumiReamer SR-REAMER SERIES



SumiReamer

SRseries

Ready to set new standards?

Highly efficient reaming with SR-Reamer!



■ SR Reaming system

SR Small Ø 7.600 - 13.100 mm

SR Medium Ø 11.900 - 140.600 mm

SR Large Ø 139.801 – 200.200 mm

- Modular Replaceable Insert Reaming System with diameter from 7.600 mm to 200.200 mm
- Fast and simple insert change
- Fast insert change in µm-area without additional adjusting effort
- Largest standard product line with customer-specific diameter without any surcharge
- The combination of cutting materials, insert and shank system provides a high level of flexibility
- Significant cost reduction thanks to high-speed data
- Low cost per part due to increased productivity and minimum machine down-times

■ Explanation of SR Reamer System sizes

Type	System Size	Ø- Area	Description
SR SMALL	SRS 08	7.600 – 8.100	SRS G/L Ø
	SRS 10	8.101 – 9.600	
	SRS 11	9.601 – 11.100	
	SRS 13	11.101 – 13.100	
SR MEDIUM	SR 16	11.900 – 15.600	SR G/L Ø
	SR 19	15.601 – 18.600	
	SR 24	18.601 – 23.600	
	SR 29	23.601 – 28.600	
	SR 36	28.601 – 35.600	
	SR 44	35.601 – 43.600	
	SR 52	43.601 – 51.600	
	SR 61	51.601 – 60.600	
	SR 81	60.601 – 80.600	
	SR 101	80.601 – 100.600	
	SR 121	100.601 – 120.600	
	SR 141	120.601 – 140.600	
SR LARGE	SRE 150	139.801 – 149.800	SRE G/L Ø
	SRE 160	149.801 – 159.800	
	SRE 170	159.801 – 169.800	
	SRE 180	169.801 – 179.800	
	SRE 190	179.801 – 189.800	
	SRE 200	189.801 – 200.200	

■ ISO- Hole tolerances manufacturing tolerance

SR S G 12.2H7 A06 F05 12R1

(1) (2) (3) (4a) (5) (6) (7)

For orders with specifications of ISO- Hole tolerance (e.g. H7) the diameter is defined by Sumitomo standard.

Depending on tolerance range, the final diameter will be within **65% to 80%** of the total tolerance.

■ Free Hole tolerance

SR S G 8+20-10 A06 F05 12R1

(1) (2) (3) (4b) (5) (6) (7)

For orders with specifications of free hole tolerance the diameter is defined by Sumitomo standard.

Depending on tolerance range, the final diameter will be within **65% to 80%** of the total tolerance.

■ Target Size (Q-Insert)

SR S G 12.205 Q+3-3 A06 F05 12R1

(1) (2) (3) (4c) (5) (6) (7)

A Q-insert designation is to be selected for any specific insert dimension.

Opposed to standard inserts where all tolerances refer to the hole tolerance, Q-inserts indicate the required insert diameter (target size).

Q-inserts are recommended for special applications where standard tolerance ranges are not applicable.

(1) **SR = SumiReamer**

(2) **S = Small** (Ø 7.600 - 13.100)
(empty) = **Medium** (Ø11.900 - 140.600)
E = Large (Ø 139.801 – 200.200)

(3) **G = Straight fluted** (Flute form)
L = Left Helical Fluted (Flute form)

(4a) **12.2H7** = Diameter (mm) and tolerance in ISO standard

(4b) $8 \begin{smallmatrix} +20 \\ -10 \end{smallmatrix} = \text{Ø } 8 \begin{smallmatrix} +20 \\ -10 \end{smallmatrix}$ Diameter
with free tolerance ($\begin{smallmatrix} +20 \\ -10 \end{smallmatrix} \mu\text{m}$)

(4c) **12.205 Q+3-3** =
Diameter as target size and Manufacturing tolerance of cutting insert

(5) **A06** = Standard cutting geometry (angle ≤ 45°)
B06 = Standard cutting geometry (angle ≤ 25°)
Many more geometries available - Please contact Sumitomo.

(6) **F05** = Carbide (Cutting material)
F0500 = Carbide uncoated (Cutting material)
T12 = Cermet (Cutting material)
T1200A = Cermet uncoated (Cutting material)

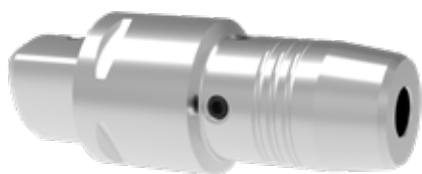
(7) **12R1** = Coating: AlCrN thin coating
(many other coatings available)



There is a big variety of combinations available. Please contact your Sumitomo reference person.

SR Small Ø 7.600 - 13.100 mm

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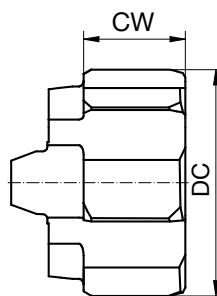


Spare parts on page 26/27.

SR Reamer Small

Cuttin Insert

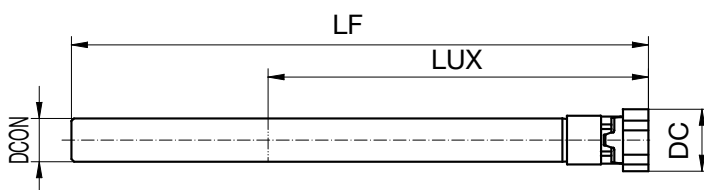
- **SRSG** Straight fluted: for through and blind hole
- **SRSL** left helical fluted: for through holes



SRSG / SRSL

System size	Description		Ø DC (mm)	CW (mm)	Number of teeth
	Straight fluted	Left helical fluted			
SRS 08	SRSG08	SRSL08	7.600 - 8.100	4.5	4
SRS 10	SRSG10	SRSL10	8.101 - 9.600	4.5	6
SRS 11	SRSG11	SRSL11	9.601 - 11.100	4.5	6
SRS 13	SRSG13	SRSL13	11.101 - 13.100	4.5	6

Holder



Steel Holder SRSD / SRSB

Dimensions (mm)

System size	Ø DC (mm)	Description				DCON	LF	LUX
		SRSD (Through Hole)		SRSB (Stop Hole)				
		Stock	Cat. No.	Stock	Cat. No.			
SRS 08	7.600 - 8.100	●	SRSD08-06-086	●	SRSB08-06-086	6	86	50
SRS 10	8.101 - 9.600	●	SRSD10-06-096	●	SRSB10-06-096	6	96	60
SRS 11	9.601 - 11.100	●	SRSD11-08-106	●	SRSB11-08-106	8	106	70
SRS 13	11.101 - 13.100	●	SRSD13-08-120	●	SRSB13-08-120	8	120	84

Carbide Holder SRSD / SRSB

Dimensions (mm)

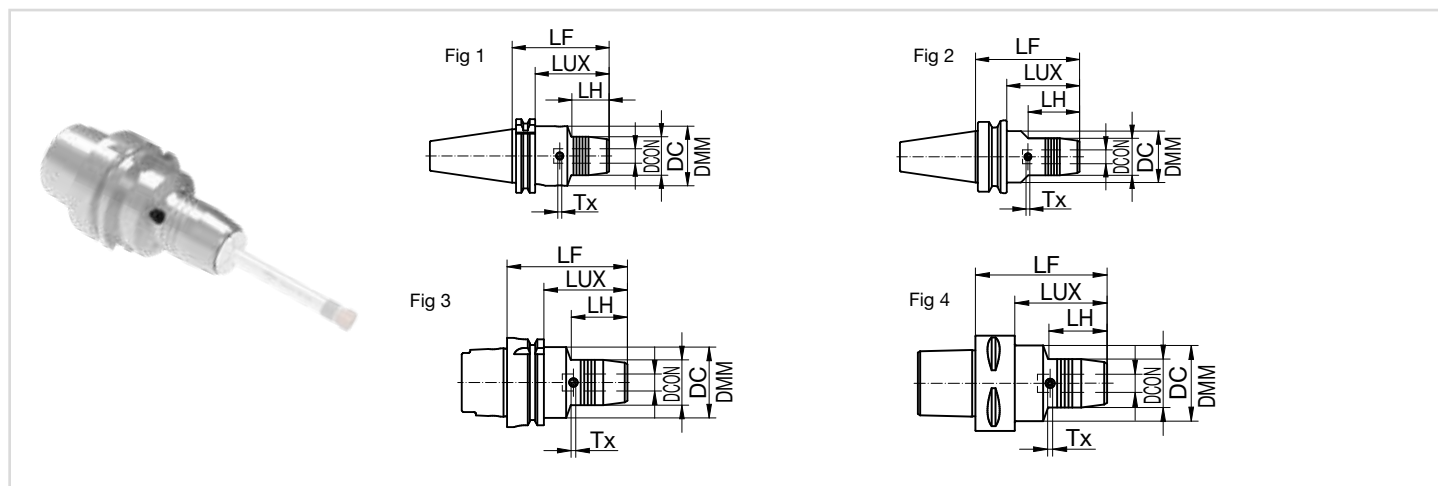
System size	Ø DC (mm)	Description				DCON	LF	LUX
		SRSD (Through Hole)		SRSB (Stop Hole)				
		Stock	Cat. No.	Stock	Cat. No.			
SRS 08	7.600 - 8.100	●	SRSD08-06-102HM	●	SRSB08-06-102HM	6	102	66
SRS 10	8.101 - 9.600	●	SRSD10-06-116HM	●	SRSB10-06-116HM	6	116	80
SRS 11	9.601 - 11.100	●	SRSD11-08-126HM	●	SRSB11-08-126HM	8	126	90
SRS 13	11.101 - 13.100	●	SRSD13-08-150HM	●	SRSB13-08-150HM	8	150	114



All Holders can be shortened to optimal length upon request (extra charge).

●: Stock Europe

Compensating Hydraulic Chuck (TENDOzero)



DIN 69871-AD/B

Dimensions (mm)

Cat. No.	Stock	Interface	DC	DCON	DMM	LF	LH	LUX	Weight (kg)	Fig
204266Z	●	SK40	42	20	50	81	34	62	1.4	1
204246Z	●	SK50	42	20	50	81	34	62	3.3	1

MAS-BT JIS 6339-AD/B

Dimensions (mm)

Cat. No.	Stock	Interface	DC	DCON	DMM	LF	LH	LUX	Weight (kg)	Figs
205636Z	●	BT30	42	20	45	90	48	63	1.5	2
204445Z	●	BT40	42	20	45	90	48	63	1.5	2
204457Z	●	BT50	42	20	45	90	34	52	4.0	2

DIN 69893-HSK-A

Dimensions (mm)

Cat. No.	Stock	Interface	DC	DCON	DMM	LF	LH	LUX	Weight (kg)	Fig
204056Z	●	HSK63	42	20	50	90	48	64	1.3	3
204066Z	●	HSK100	42	20	50	105	59	76	2.8	3

*Coolant tube not included.

Polygon DIN 26623-1-PSC

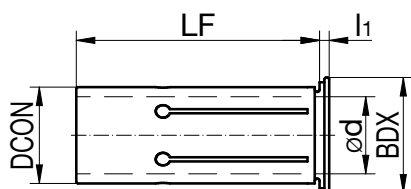
Dimensions (mm)

Gat. No.	Stock	Interface	DC	DCON	DMM	LF	LH	LUX	Weight (kg)	Figs
201846Z	●	PSC50	42	20	50	90	52	-	1.0	4
201856Z	●	PSC63	42	20	63	97	55	-	1.6	4

SR Reamer Small



Fig 1



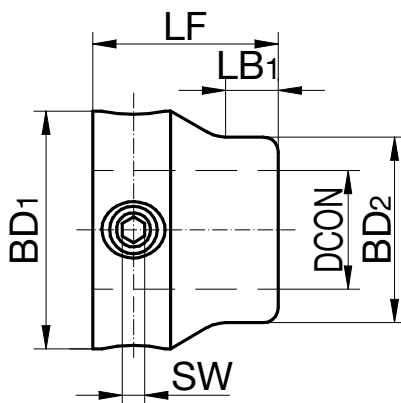
Reducers for Hydro-Compensation Chuck (TENDOzero)

Dimensions (mm)

Cat. No.	Stock	BDX	ød	DCON	LF	l ₁	Fig
0207923	●	24.0	6	20	50.5	2	1
0207925	●	24.0	8	20	50.5	2	1



Fig 2



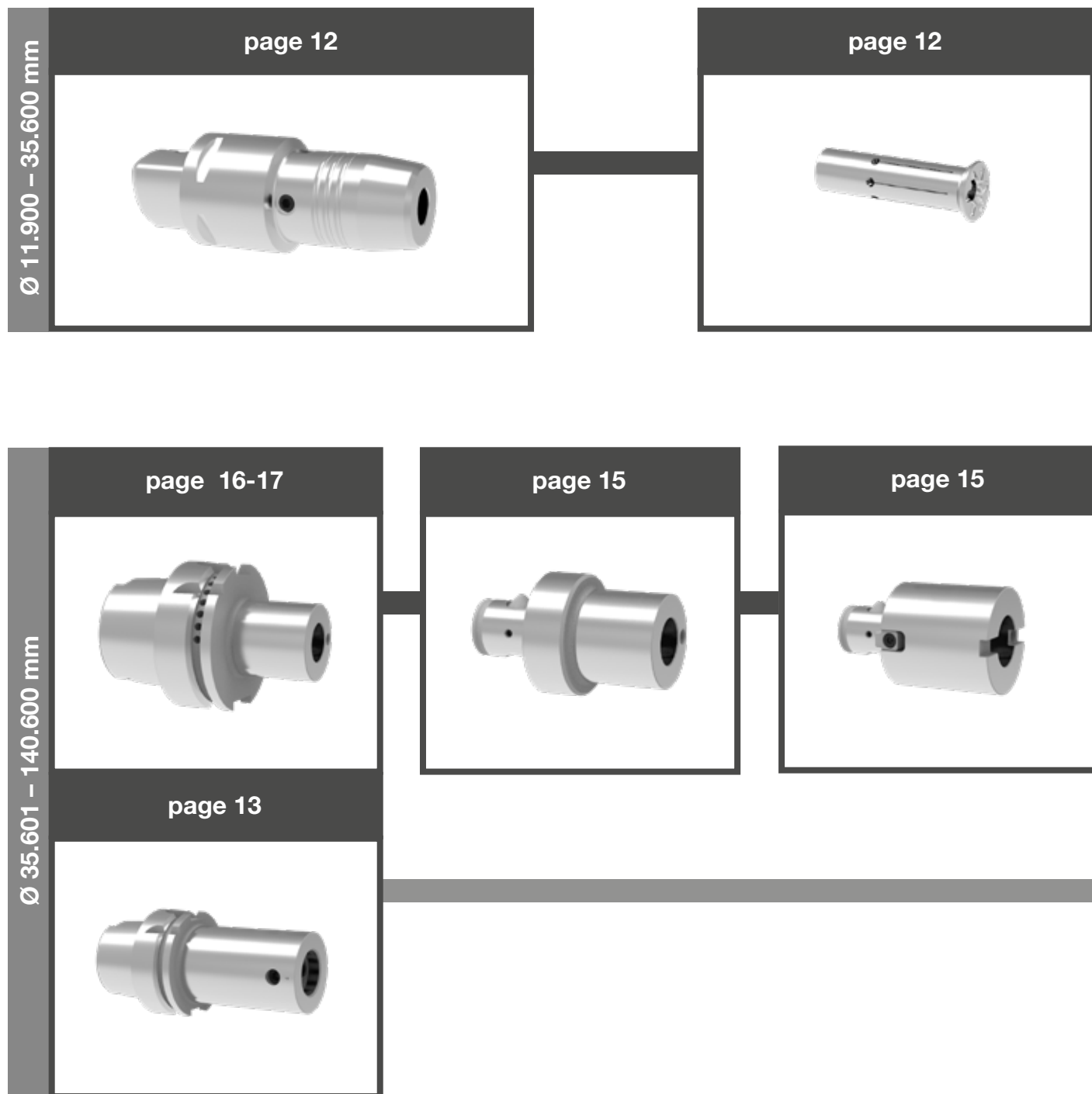
Compensation Sleeve

Dimensions (mm)

System size	Description	Stock	DCON	BD ₁	BD ₂	LF	LB ₁	SW	Fig
SRS 08	MHS08/10-06-20-016	●	6	20	16	16	3	2.5	2
SRS 10	MHS08/10-06-20-016	●	6	20	16	16	3	2.5	2
SRS 11	MHS11/13-08-22-018	●	8	22	16	18	4	2.5	2
SRS 13	MHS11/13-08-22-018	●	8	22	16	18	4	2.5	2

Note: Not applicable for carbide holders.

SR Medium Ø 11.900 - 140.600 mm



Spare parts on page 26/27.

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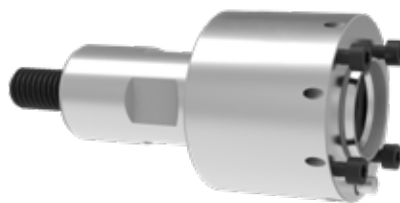
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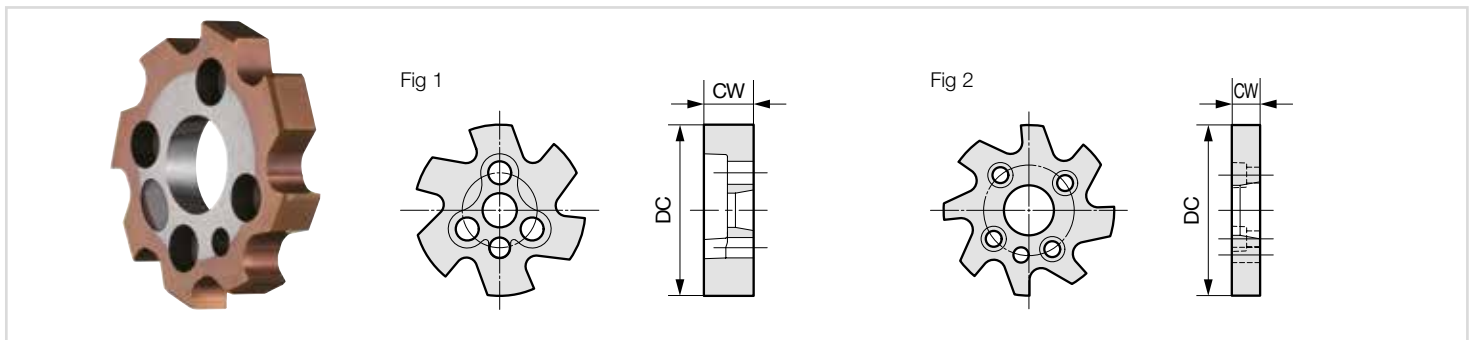
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SR Reamer Medium

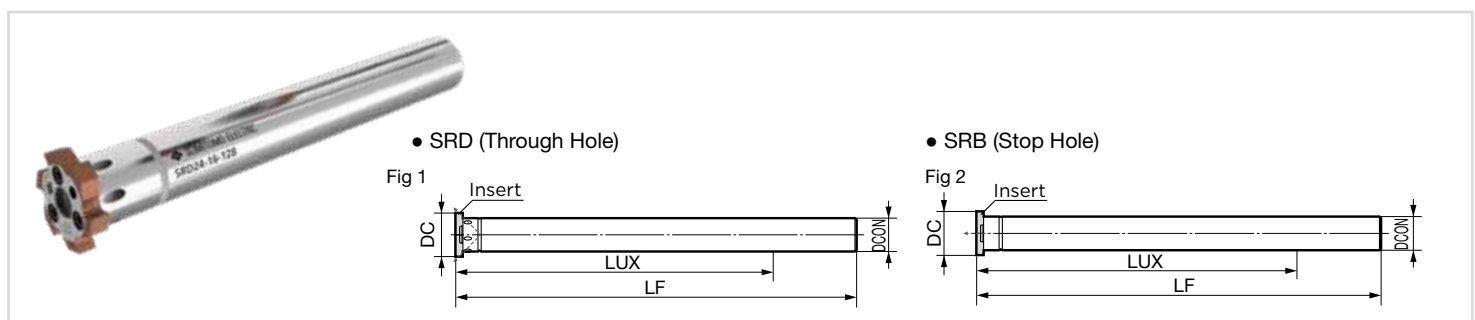
Cutting Insert

- SRG straight fluted: for through and blind holes
- SRL left helical fluted: for through holes



SRG / SRL

System size	Descriptions		Ø DC (mm)	CW (mm)	Number of teeth	Fig
	Straight fluted	Left helical fluted				
SR 16	SRG16	SRL16	11.900 – 15.600	4.3	6	1
SR 19	SRG19	SRL19	15.601 – 18.600	4.3	6	1
SR 24	SRG24	SRL24	18.601 – 23.600	4.3	6	1
SR 29	SRG29	SRL29	23.601 – 28.600	4.3	8	1
SR 36	SRG36	SRL36	28.601 – 35.600	4.3	8	1
SR 44	SRG44	SRL44	35.601 – 43.600	4.3	8	2
SR 52	SRG52	SRL52	43.601 – 51.600	4.3	10	2
SR 61	SRG61	SRL61	51.601 – 60.600	4.3	10	2
SR 81	SRG81	SRL81	60.601 – 80.600	4.3	12	2
SR 101	SRG101	SRL101	80.601 – 100.600	4.3	12	2
SR 121	SRG121	SRL121	100.601 – 120.600	5.3	12	2
SR 141	SRG141	SRL141	120.601 – 140.600	5.3	12	2



Holder (ø11.900 to 35.600mm)

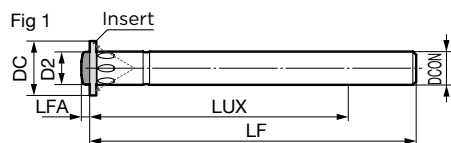
Dimensions (mm)

System size	Ø DC (mm)		Holder Cat. No.												DCON	LF	LUX
			SRD			SRB			Carbide Shank SRD			Carbide Shank SRB					
			Stock	Cat. No.	Fig	Stock	Cat. No.	Fig	Stock	Cat. No.	Fig	Stock	Cat. No.	Fig			
SR 16	Short	11.900 - 15.600	● SRD16-10-100	1	● SRB16-10-100	2	—			—			10	100	60		
SR 19		15.601 - 18.600	● SRD19-12-115	1	● SRB19-12-115	2	—			—			12	115	70		
SR 24		18.601 - 23.600	● SRD24-16-128	1	● SRB24-16-128	2	—			—			16	128	80		
SR 29		23.601 - 28.600	● SRD29-20-145	1	● SRB29-20-145	2	—			—			20	145	95		
SR 36		28.601 - 35.600	● SRD36-25-170	1	● SRB36-25-170	2	—			—			25	170	110		
SR 16	Long	11.900 - 15.600	● SRD16-10-160	1	● SRB16-10-160	2	● SRD16-10-160HM	1	● SRB16-10-160HM	2	10	160	120				
SR 19		15.601 - 18.600	● SRD19-12-185	1	● SRB19-12-185	2	● SRD19-12-185HM	1	● SRB19-12-185HM	2	12	185	140				
SR 24		18.601 - 23.600	● SRD24-16-208	1	● SRB24-16-208	2	● SRD24-16-208HM	1	● SRB24-16-208HM	2	16	208	160				
SR 29		23.601 - 28.600	● SRD29-20-240	1	● SRB29-20-240	2	● SRD29-20-240HM	1	● SRB29-20-240HM	2	20	240	190				
SR 36		28.601 - 35.600	● SRD36-25-274	1	● SRB36-25-274	2	● SRD36-25-274HM	1	● SRB36-25-274HM	2	25	274	214				

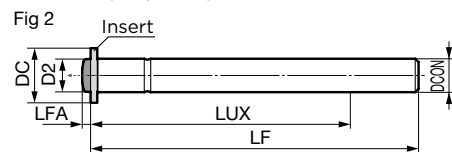
SR Reamer Medium



● SRD-SD (Through Hole)



● SRB-SD (Stop Hole)



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

Dimensions (mm)

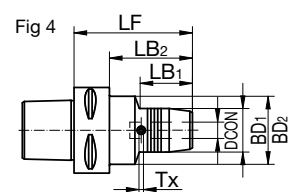
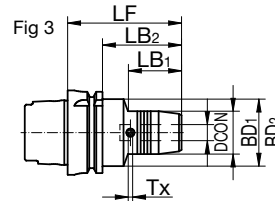
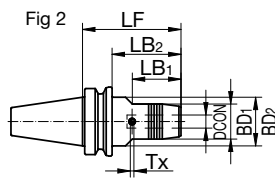
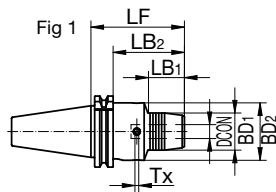
System size			Ø DC (mm)		Holder Cat. No.						DCON	LF	LUX	D2	LFA
					SRD (Through Hole)			SRB (Stop Hole)							
					Stock	Cat. No.	Fig	Stock	Cat. No.	Fig					
SR 16	Short	11.900 - 15.600	●	SRD16-10-100SD	1	●	SRB16-10-100SD	2	10	100	60	9.8	2.5		
SR 19		15.601 - 18.600	●	SRD19-12-115SD	1	●	SRB19-12-115SD	2	12	115	70	11.8	3.0		
SR 24		18.601 - 23.600	●	SRD24-16-128SD	1	●	SRB24-16-128SD	2	16	128	80	15.8	4.0		
SR 29		23.601 - 28.600	●	SRD29-20-145SD	1	●	SRB29-20-145SD	2	20	145	95	15.8	4.0		
SR 36		28.601 - 35.600	●	SRD36-25-170SD	1	●	SRB36-25-170SD	2	25	170	110	24.5	4.0		
SR 16	Long	11.900 - 15.600	●	SRD16-10-160SD	1	●	SRB16-10-160SD	2	10	160	120	9.8	2.5		
SR 19		15.601 - 18.600	●	SRD19-12-185SD	1	●	SRB19-12-185SD	2	12	185	140	11.8	3.0		
SR 24		18.601 - 23.600	●	SRD24-16-208SD	1	●	SRB24-16-208SD	2	16	208	160	15.8	4.0		
SR 29		23.601 - 28.600	●	SRD29-20-240SD	1	●	SRB29-20-240SD	2	20	240	190	15.8	4.0		
SR 36		28.601 - 35.600	●	SRD36-25-274SD	1	●	SRB36-25-274SD	2	25	274	214	24.5	4.0		

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

Dimensions (mm)

System size		Ø DC (mm)		Holder Cat. No.						DCON	LF	LUX	D2	LFA
				SRD (Through Hole)			SRB (Stop Hole)							
				Stock	Cat. No.	Fig	Stock	Cat. No.	Fig					
SR 16	Long	11.900 - 15.600	●	SRD16-10-160HMSD	1	●	SRB16-10-160HMSD	2	10	160	120	9.8	2.5	
SR 19		15.601 - 18.600	●	SRD19-12-185HMSD	1	●	SRB19-12-185HMSD	2	12	185	140	11.8	3.0	
SR 24		18.601 - 23.600	●	SRD24-16-208HMSD	1	●	SRB24-16-208HMSD	2	16	208	160	15.8	4.0	
SR 29		23.601 - 28.600	●	SRD29-20-240HMSD	1	●	SRB29-20-240HMSD	2	20	240	190	15.8	4.0	
SR 36		28.601 - 35.600	●	SRD36-25-274HMSD	1	●	SRB36-25-274HMSD	2	25	274	214	24.5	4.0	

"TENDOzero" Compensating Hydraulic Chuck



DIN 69871-AD/B

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Weight (kg)	Fig
204266Z	●	SK40	20	42	50	81	34	62	1.4	1
204267Z	●	SK40	32	63	80	81	26	62	2.0	1
204246Z	●	SK50	20	42	50	81	34	62	3.3	1
204247Z	●	SK50	32	64	70	104	63	84	4.4	1

MAS-BT JIS 6339-AD/B

Dimensions (mm)

Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Weight (kg)	Fig
205636Z	●	BT30	20	42	45	90	48	63	1.5	2
204445Z	●	BT40	20	42	45	90	48	63	1.5	2
204457Z	●	BT50	20	42	45	90	34	52	4.0	2
204458Z	●	BT50	32	64	70	120	63	82	5.3	2

DIN 69893-HSK-A

Dimensions (mm)

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

* Coolant tube is not included.

DIN 26623-1-PSC

Dimensions (mm)

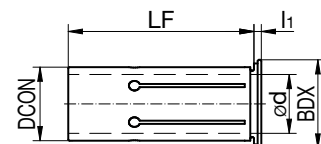
Cat. No.	Stock	Size	DCON	BD1	BD2	LF	LB1	LB2	Weight (kg)	Fig
201846Z	●	PSC50	20	42	50	90	52	-	1.0	4
201856Z	●	PSC63	20	42	63	97	55	-	1.6	4
201858Z	●	PSC63	32	63	63	110	62	-	2.8	4

Reducers for compensating hydraulic chuck (TENDOzero)

Dimensions (mm)

Cat. No.	Stock	BDX	ød	DCON	LF	l ₁	Fig
0207927	●	24.0	10	20	50.5	2	1
0207929	●	24.0	12	20	50.5	2	1
0207933	●	24.0	16	20	50.5	2	1
0207947	●	35.5	20	32	60.5	3	1
0207948	●	35.5	25	32	60.5	3	1

Fig 1

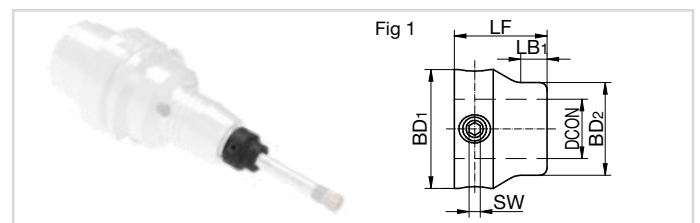


Compensation Sleeve

Dimensions (mm)

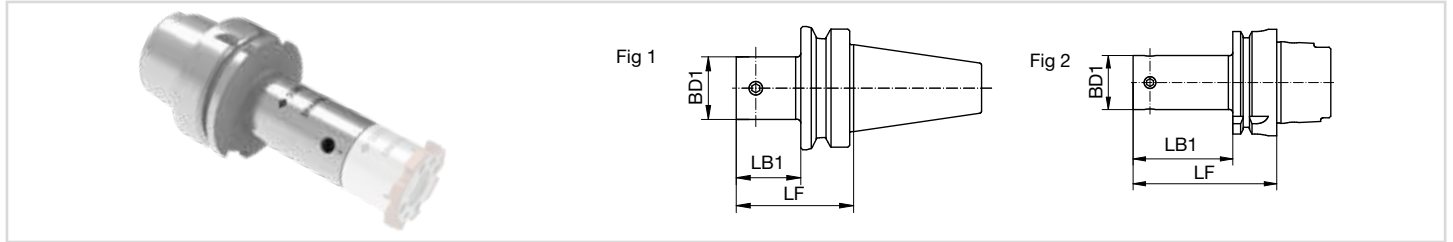
System size	Cat. No.	Stock	DCON	BD1	BD2	LF	LB1	SW	Fig
SR 16	MH16-10-26-020	●	10	26	20	20	5	3	1
SR 19	MH19-12-28-020	●	12	28	22	20	5	3	1
SR 24	MH24-16-32-025	●	16	32	25	25	7	3	1
SR 29	MH29-20-40-032	●	20	40	32	32	10	4	1
SR 36	MH36-25-45-035	●	25	45	38	35	13	4	1

note: not applicable for carbide shank insert holders



SR Reamer Medium

Adaptors (with Integrated Compensation Device)



DIN 69871-AD/B

Dimensions (mm)

System size	Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SR 44	SRAD10-40A-44-065	●	SK40	32	65	46	1.1	1
SR 52	SRAD10-40A-52-065	●	SK40	39	65	46	1.2	1
SR 61	SRAD10-40A-61-075	●	SK40	46	75	56	1.4	1
SR 81	SRAD10-40A-81-080	●	SK40	56	80	61	1.6	1
SR 101 - SR 141	SRAD10-40A-101-095	●	SK40	76	95	76	2.2	1
SR 44	SRAD10-50A-44-065	●	SK50	32	65	46	2.9	1
SR 52	SRAD10-50A-52-065	●	SK50	39	65	46	3.0	1
SR 61	SRAD10-50A-61-075	●	SK50	46	75	56	3.2	1
SR 81	SRAD10-50A-81-085	●	SK50	56	85	66	3.6	1
SR 101 - SR 141	SRAD10-50A-101-095	●	SK50	76	95	76	4.6	1

MAS-BT JIS 6339-AD

Dimensions (mm)

System size	Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SR 44	SRAT10-40A-44-060	●	BT40	32	60	33	1.1	1
SR 52	SRAT10-40A-52-065	●	BT40	39	65	38	1.3	1
SR 61	SRAT10-40A-61-070	●	BT40	46	70	43	1.4	1
SR 81	SRAT10-40A-81-080	●	BT40	56	80	53	1.7	1
SR 101 - SR 141	SRAT10-40A-101-095	●	BT40	76	95	—	2.5	1
SR 44	SRAT10-50A-44-065	●	BT50	32	65	27	3.7	1
SR 52	SRAT10-50A-52-065	●	BT50	39	65	27	3.8	1
SR 61	SRAT10-50A-61-075	●	BT50	46	75	37	4.0	1
SR 81	SRAT10-50A-81-085	●	BT50	56	85	47	4.3	1
SR 101 - SR 141	SRAT10-50A-101-095	●	BT50	76	95	57	5.1	1

DIN 69893-HSK-A

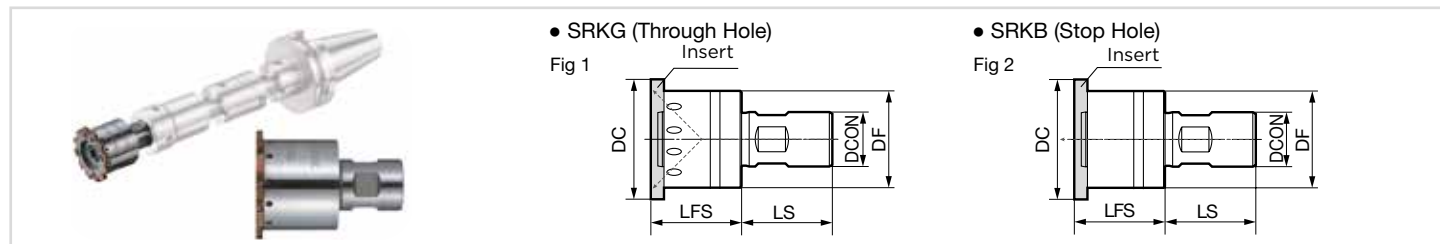
Dimensions (mm)

System size	Cat. No.	Stock	Size	BD ₁	LF	LB ₁	Weight (kg)	Fig
SR 44	SRAH10-63A-44-085	●	HSK63	32	85	59	1.0	2
SR 52	SRAH10-63A-52-090	●	HSK63	39	90	64	1.2	2
SR 61	SRAH10-63A-61-100	●	HSK63	46	100	74	1.5	2
SR 81	SRAH10-63A-81-105	●	HSK63	56	105	79	1.8	2
SR 101 - SR 141	SRAH10-63A-101-120	●	HSK63	76	120	94	2.4	2
SR 44	SRAH10-100A-44-090	●	HSK100	32	90	61	2.3	2
SR 52	SRAH10-100A-52-095	●	HSK100	39	95	66	2.6	2
SR 61	SRAH10-100A-61-100	●	HSK100	46	100	71	2.8	2
SR 81	SRAH10-100A-81-120	●	HSK100	56	120	91	3.5	2
SR 101 - SR 141	SRAH10-100A-101-130	●	HSK100	76	130	101	5.0	2

*Coolant tube is not included

SR Reamer Medium

Insert Holders

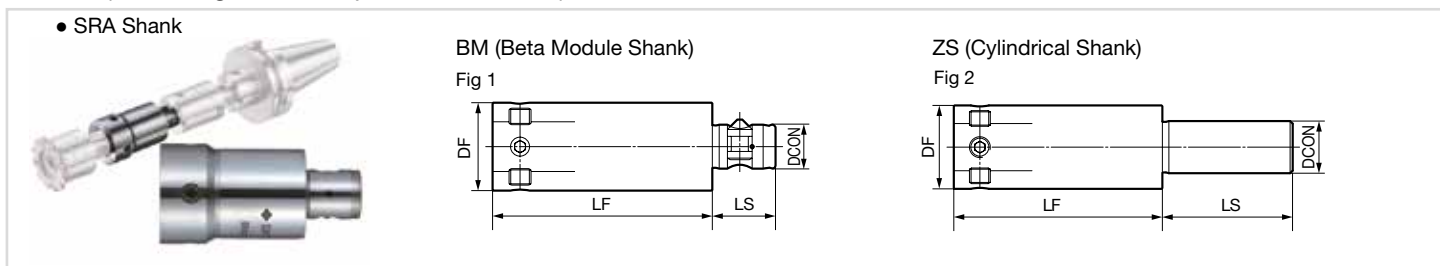


ø35.601 - 140.600 mm

Dimensions (mm)

System size	Ø DC (mm)	Holder Cat. No.						DF	DCON	LFS	LS	Insert Screws
		Stock	SRKG	Fig	Stock	SRKB	Fig					
SR 44	35.601 - 43.600	●	SRKG44-32-18-030	1	●	SRKB44-32-18-030	2	32	18	30	30	C00-90-02 (4x)
SR 52	43.601 - 51.600	●	SRKG52-39-20-035	1	●	SRKB52-39-20-035	2	39	20	35	30	C00-90-02 (5x)
SR 61	51.601 - 60.600	●	SRKG61-46-25-040	1	●	SRKB61-46-25-040	2	46	25	40	35	C00-90-02 (5x)
SR 81	60.601 - 80.600	●	SRKG81-56-32-050	1	●	SRKB81-56-32-050	2	56	32	50	40	C00-90-04 (4x)
SR 101	80.601 - 100.600	●	SRKG101-76-40-060	1	●	SRKB101-76-40-060	2	76	40	60	50	C00-90-04 (8x)
SR 121	100.601 - 120.600	●	SRKG121-76-40-060	1	●	SRKB121-76-40-060	2	76	40	60	50	C00-90-04 (8x)
SR 141	120.601 - 140.600	●	SRKG141-76-40-060	1	●	SRKB141-76-40-060	2	76	40	60	50	C00-90-04 (8x)

Shanks (with Integrated Compensation Device)

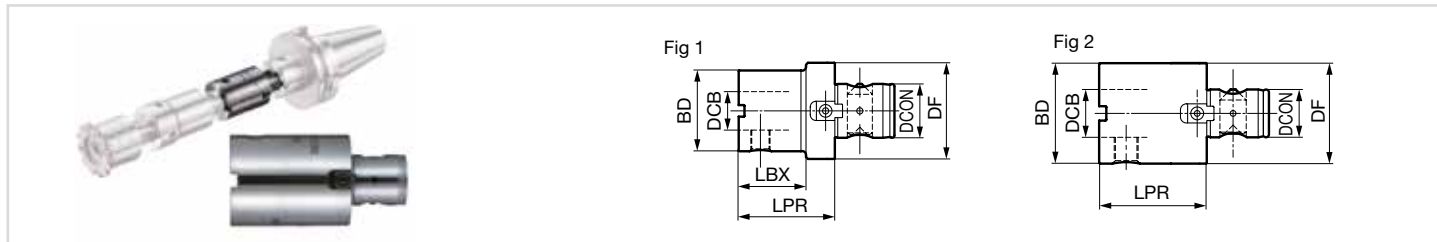


Dimensions (mm)

System size	Shank Type	Ø DC (mm)	Holder Cat. No.		DF	DCON	LF	LS	Fig	
			Stock	SRA						
SR 44	BM	35.601 - 43.600	●	SRA44-32-BM32-055	32	BM-32	55	23.0	1	
			●	SRA44-32-BM32-080	32	BM-32	80	23.0	1	
SR 52		43.601 - 51.600	●	SRA52-39-BM40-060	39	BM-40	60	26.0	1	
			●	SRA52-39-BM40-100	39	BM-40	100	26.0	1	
SR 61		51.601 - 60.600	●	SRA61-46-BM50-070	46	BM-50	70	31.0	1	
			●	SRA61-46-BM50-120	46	BM-50	120	31.0	1	
SR 81		60.601 - 80.600	●	SRA81-56-BM50-080	56	BM-50	80	31.0	1	
			●	SRA81-56-BM50-140	56	BM-50	140	31.0	1	
SR 101	ZS	80.601 - 140.600	●	SRA101-76-BM63-100	76	BM-63	100	38.0	1	
			●	SRA101-76-BM63-160	76	BM-63	160	38.0	1	
SR 44		35.601 - 43.600	●	SRA44-32-ZS20-055	32	ZS-20	55	50.0	2	
			●	SRA44-32-ZS20-080	32	ZS-20	80	50.0	2	
SR 52		43.601 - 51.600	●	SRA52-39-ZS25-060	39	ZS-25	60	56.0	2	
			●	SRA52-39-ZS25-100	39	ZS-25	100	56.0	2	
SR 61		51.601 - 60.600	●	SRA61-46-ZS32-070	46	ZS-32	70	60.0	2	
			●	SRA61-46-ZS32-120	46	ZS-32	120	60.0	2	
SR 81		60.601 - 80.600	●	SRA81-56-ZS40-080	56	ZS-40	80	70.0	2	
			●	SRA81-56-ZS40-140	56	ZS-40	140	70.0	2	
SR 101 - 141		80.601 - 140.600	●	SRA101-76-ZS40-100	76	ZS-40	100	70.0	2	
			●	SRA101-76-ZS40-160	76	ZS-40	160	70.0	2	

●: Stock Europe

Beta-Module Reducers and Extensions



Reducers Beta-Module

Dimensions (mm)

Cat. No.	Stock	BD	DCB	DF	DCON	LPR	LBX	Weight (kg)	Fig
B12-40-32-045	●	32	BM-32	42	BM-40	45	30	0.3	1
B12-50-40-050	●	42	BM-40	50	BM-50	50	35	0.5	1
B12-63-32-050	●	32	BM-32	63	BM-63	50	30	0.9	1
B12-63-40-055	●	42	BM-40	63	BM-63	55	35	1.1	1
B12-63-50-060	●	50	BM-50	63	BM-63	60	40	1.1	1
B12-80-40-060	●	42	BM-40	80	BM-80	60	35	2.2	1
B12-80-63-060	●	63	BM-63	80	BM-80	60	35	2.4	1
B12-100-63-060	●	63	BM-63	100	BM-100	60	35	3.3	1
B12-100-80-075	●	80	BM-80	100	BM-100	75	50	3.5	1

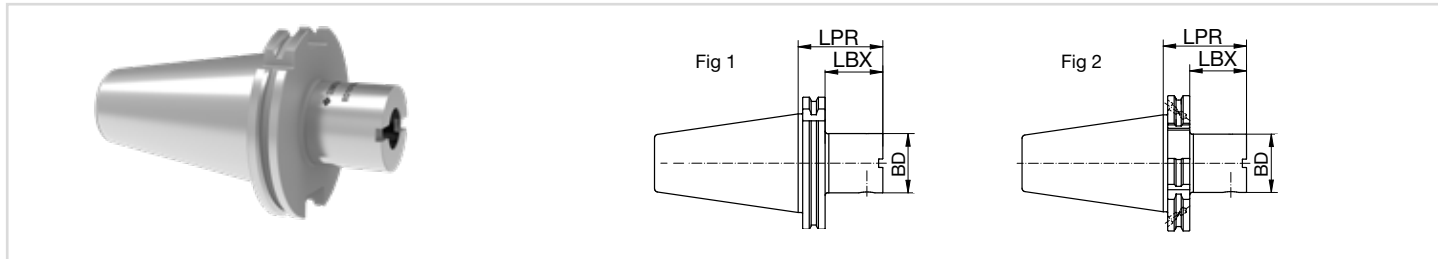
Extensions Beta-Module

Dimensions (mm)

Cat. No.	Stock	BD	DCB	DF	DCON	LPR	LBX	Weight (kg)	Fig
B13-32-32-035	●	32	BM-32	32	BM-32	35	—	0.2	2
B13-32-32-070	●	32	BM-32	32	BM-32	70	—	0.4	2
B13-40-40-045	●	42	BM-40	42	BM-40	45	—	0.4	2
B13-40-40-070	●	42	BM-40	42	BM-40	70	—	0.7	2
B13-50-50-065	●	50	BM-50	50	BM-50	65	—	1.0	2
B13-50-50-100	●	50	BM-50	50	BM-50	100	—	1.5	2
B13-63-63-060	●	63	BM-63	63	BM-63	60	—	1.3	2
B13-63-63-125	●	63	BM-63	63	BM-63	125	—	2.9	2
B13-80-80-080	●	80	BM-80	80	BM-80	80	—	2.9	2
B13-80-80-160	●	80	BM-80	80	BM-80	160	—	6.0	2
B13-100-100-080	●	100	BM-100	100	BM-100	80	—	4.9	2
B13-100-100-180	●	100	BM-100	100	BM-100	180	—	10.9	2

SR Reamer Medium

System Holders Beta-Module



DIN 69871-AD

Dimensions (mm)

Cat. No.	Stock	Size	BD	DCON	LPR	LBX	Weight (kg)	Fig
BD10-40A-32-050	●	SK40	32	BM-32	50	31	0.9	1
BD10-40A-40-035	●	SK40	42	BM-40	35	16	0.9	1
BD10-40A-40-050	●	SK40	42	BM-40	50	31	1.1	1
BD10-40A-50-050	●	SK40	50	BM-50	50	31	1.2	1
BD10-40A-63-065	●	SK40	63	BM-63	65	46	1.5	1
BD10-50A-32-060	●	SK50	32	BM-32	60	41	2.9	1
BD10-50A-40-060	●	SK50	42	BM-40	60	41	3.0	1
BD10-50A-50-060	●	SK50	50	BM-50	60	41	3.2	1
BD10-50A-63-060	●	SK50	63	BM-63	60	41	3.3	1
BD10-50A-80-070	●	SK50	80	BM-80	70	51	4.0	1
BD10-50A-100-115	●	SK50	100	BM-100	115	96	6.9	1

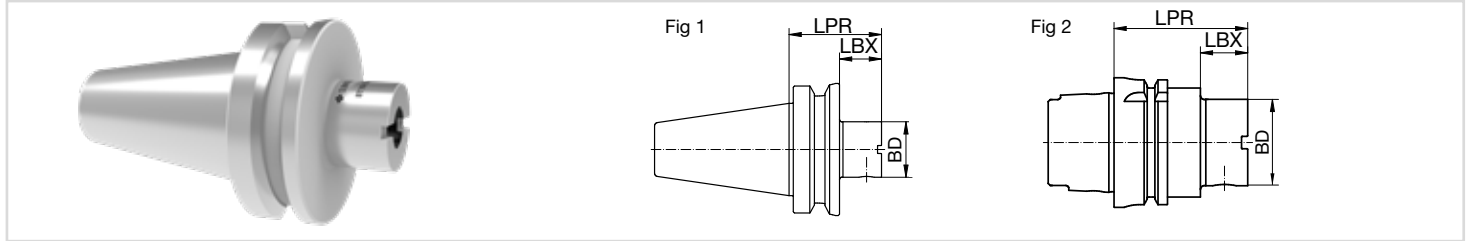
DIN 69871-B

Dimensions (mm)

Cat. No.	Stock	Size	BD	DCON	LPR	LBX	Weight (kg)	Fig
BD10-40B-40-035	●	SK40	42	BM-40	35	16	0.9	2
BD10-40B-63-065	●	SK40	63	BM-63	65	46	1.5	2
BD10-50B-32-060	●	SK50	32	BM-32	60	41	2.9	2
BD10-50B-40-060	●	SK50	42	BM-40	60	41	3.0	2
BD10-50B-50-060	●	SK50	50	BM-50	60	41	3.2	2
BD10-50B-63-060	●	SK50	63	BM-63	60	41	3.3	2
BD10-50B-100-115	●	SK50	100	BM-100	115	96	6.9	2

SR Reamer Medium

System Holders Beta-Module



MAS-BT JIS 6339-AD

Dimensions (mm)

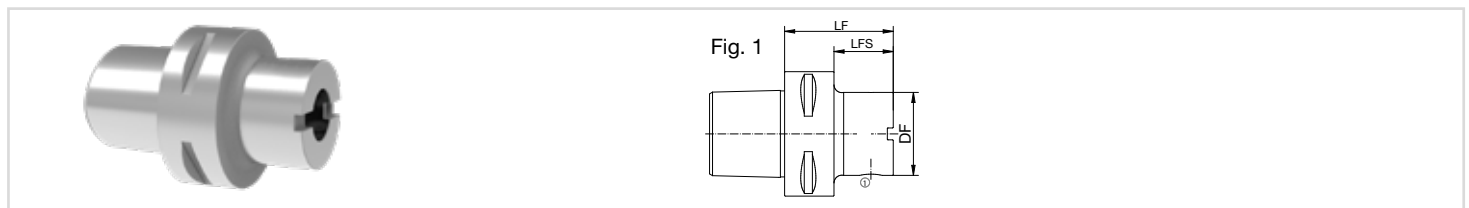
Cat. No.	Stock	Size	BD	DCON	LPR	LBX	Weight (kg)	Fig
BT10-40A-32-060	●	BT40	32	BM-32	60	33	0.9	1
BT10-40A-40-028	●	BT40	42	BM-40	28	1	0.9	1
BT10-40A-40-060	●	BT40	42	BM-40	60	33	1.2	1
BT10-40A-50-060	●	BT40	50	BM-50	60	33	1.3	1
BT10-40A-63-055	●	BT40	63	BM-63	55	28	1.4	1
BT10-50A-32-070	●	BT50	32	BM-32	70	32	3.7	1
BT10-50A-40-070	●	BT50	42	BM-40	70	32	3.9	1
BT10-50A-50-070	●	BT50	50	BM-50	70	32	4.1	1
BT10-50A-63-080	●	BT50	63	BM-63	80	42	4.3	1
BT10-50A-80-100	●	BT50	80	BM-80	100	62	5.5	1
BT10-50A-100-110	●	BT50	100	BM-100	110	72	7.0	1

DIN 69893-HSK-A

Dimensions (mm)

Cat. No.	Stock	Size	BD	DCON	LPR	LBX	Weight (kg)	Fig
BH10-63A-32-060	●	HSK63	32	BM-32	60	34	0.9	2
BH10-63A-40-065	●	HSK63	42	BM-40	65	23	1.2	2
BH10-63A-50-070	●	HSK63	50	BM-50	70	44	1.3	2
BH10-63A-63-080	●	HSK63	63	BM-63	80	38	1.4	2
BH10-100A-32-060	●	HSK100	32	BM-32	60	31	3.7	2
BH10-100A-40-080	●	HSK100	42	BM-40	80	35	3.9	2
BH10-100A-50-080	●	HSK100	50	BM-50	80	35	4.1	2
BH10-100A-63-080	●	HSK100	63	BM-63	80	35	4.3	2
BH10-100A-80-090	●	HSK100	80	BM-80	90	45	5.5	2
BH10-100A-100-100	●	HSK100	100	BM-100	100	55	7.0	2

* Coolant tube is not included



ISO 26623-1-PSC

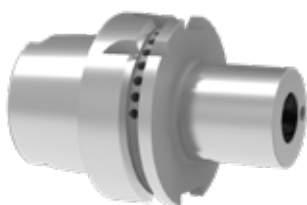
Dimensions (mm)

Size	Beta	Stock	Size	DF	LFS	LF	DCON	Weight (kg)	Fig
PSC63	32	●	BC10-63-32-050	32	35	50	BM-32	1.0	1
PSC63	42	●	BC10-63-40-055	42	30	55	BM-40	1.2	1
PSC63	50	●	BC10-63-50-060	50	35	60	BM-50	1.2	1
PSC63	63	●	BC10-63-63-065	63	40	65	BM-63	1.5	1
PSC80	32	●	BC10-80-32-050	32	20	50	BM-32	1.8	1
PSC80	40	●	BC10-80-40-055	42	25	55	BM-40	1.9	1
PSC80	50	●	BC10-80-50-060	50	30	60	BM-50	2.0	1
PSC80	63	●	BC10-80-63-065	63	35	65	BM-63	2.3	1

●: Stock Europe

SR Large Ø 139.801 – 200.200 mm

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page 24



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Spare parts on page 26/27.

page 21



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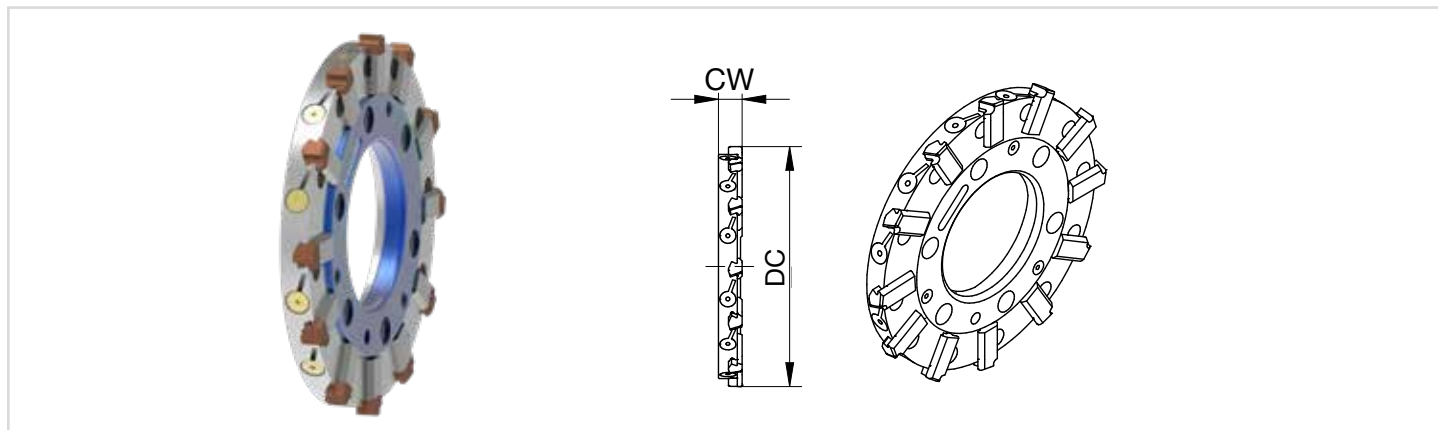


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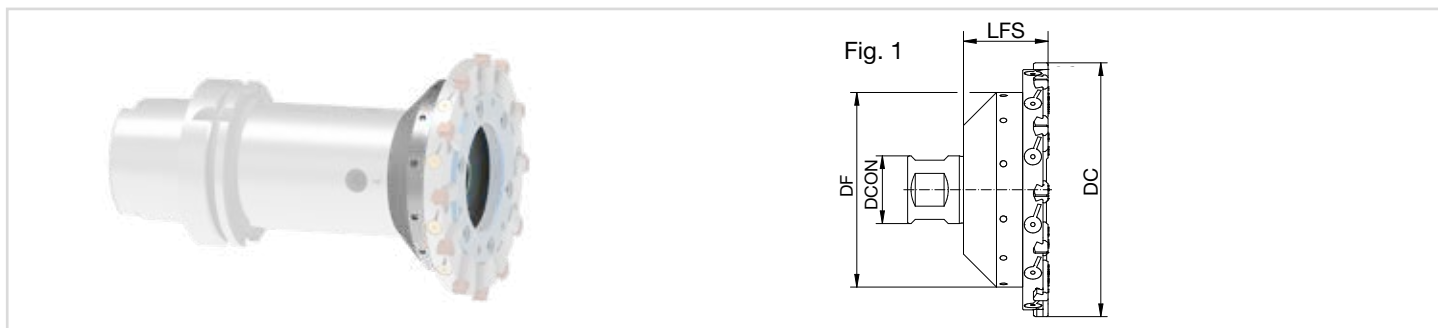
SR Reamer Large

Cutting Insert



SRSG / SRSL

System size	Description		Ø DC (mm)	CW (mm)	Number of teeth
	Straight fluted	Left helical fluted			
SRE 150	SREG150	SREL150	139.801 - 149.800	15	12
SRE 160	SREG160	SREL160	149.801 - 159.800		
SRE 170	SREG170	SREL170	159.801 - 169.800		
SRE 180	SREG180	SREL180	169.801 - 179.800		
SRE 190	SREG190	SREL190	179.801 - 189.800		
SRE 200	SREG200	SREL200	189.801 - 200.200		

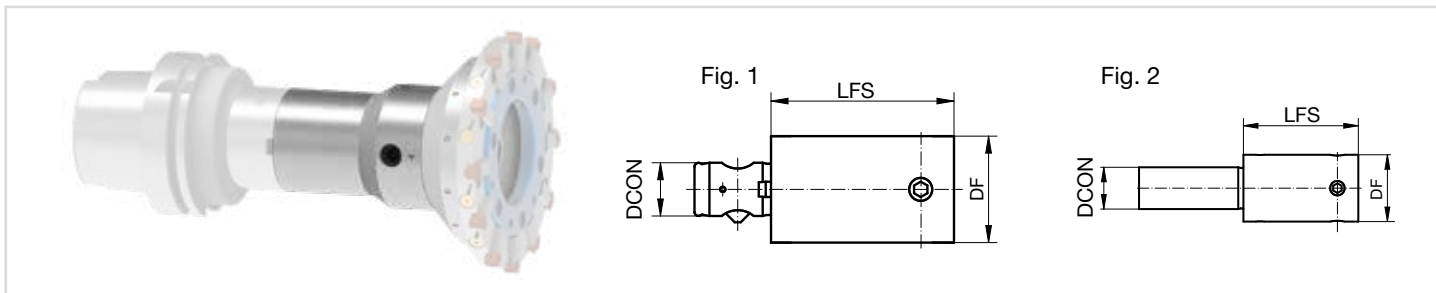


Insert Holder

Dimensions (mm)

System size	Ø DC (mm)	Stock	Cat. No.	DF	DCON	LFS	Weight (kg)	Fig
SRE 150 - 160	139.801 - 159.800	●	SRKG150-115-40-050	115	40	50	2.6	1
SRE 170 - 180	159.801 - 179.800	●	SRKG170-135-40-050	135	40	50	3.4	1
SRE 190 - 200	179.801 - 200.200	●	SRKG190-155-40-050	155	40	50	4.5	1

SR Reamer Large



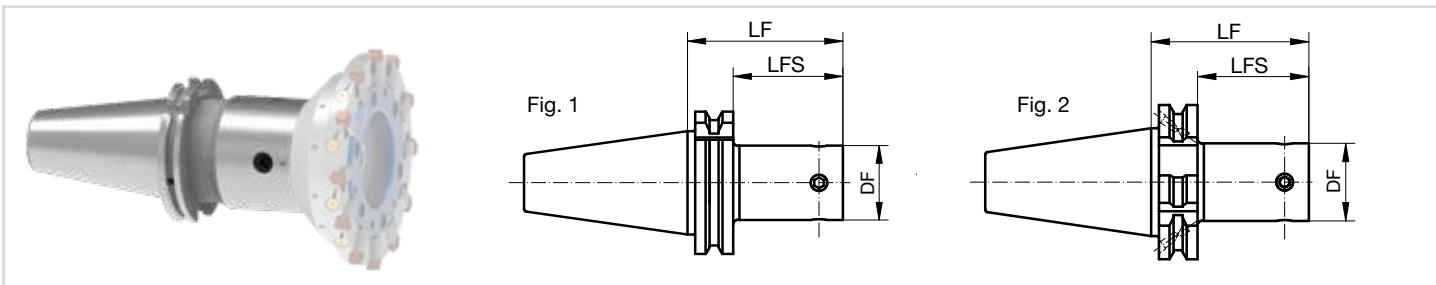
Shanks (With Integrated Compensation Device)

Dimensions (mm)

System size	Ø DC (mm)	Stock	Cat. No.	DF	DCON	LFS	Weight (kg)	Fig
SRE 150 - 200	139.801 - 200.200	●	SRA101-76-BM63-100	76	BM-63	100	2.5	1
		●	SRA101-76-BM63-160	76	BM-63	160	3.9	1
		●	SRA101-76-ZS40-100	76	ZS-40	100	2.8	2
		●	SRA101-76-ZS40-160	76	ZS-40	160	4.2	2

BM = Beta Module
ZS = Cylindrical Shank

Adaptors (With Integrated Compensation Device)



DIN 69871-AD

Dimensions (mm)

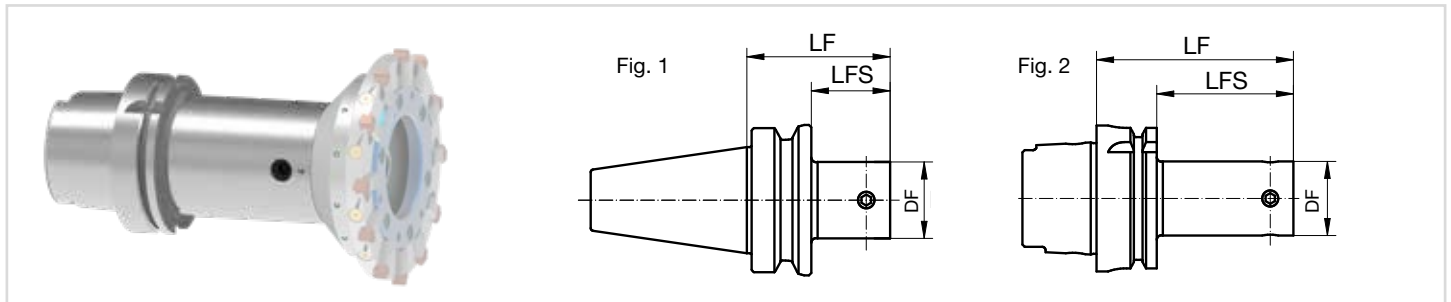
System size	Size	Stock	Cat. No.	DF	LFS	LF	Weight (kg)	Fig
SRE 150 - 200	SK40	●	SRAD10-40A-101-095	76	76	95	2.2	1
SRE 150 - 200	SK50	●	SRAD10-50A-101-095	76	76	95	4.6	1

DIN 69871-B

Dimensions (mm)

System size	Size	Stock	Cat. No.	DF	LFS	LF	Weight (kg)	Fig
SRE 150 - 200	SK40	●	SRAD10-40B-101-095	76	76	95	2.2	2
SRE 150 - 200	SK50	●	SRAD10-50B-101-095	76	76	95	4.6	2

Adaptors (With Integrated Compensation Device)



MAS-BT JIS 6339-AD

Dimensions (mm)

System size	Size	Stock	Cat. No.	DF	LFS	LF	Weight (kg)	Fig
SRE 150 - 200	BT40	●	SRAT10-40A-101-095	76	—	95	2.5	1
SRE 150 - 200	BT50	●	SRAT10-50A-101-095	76	57	95	5.1	1

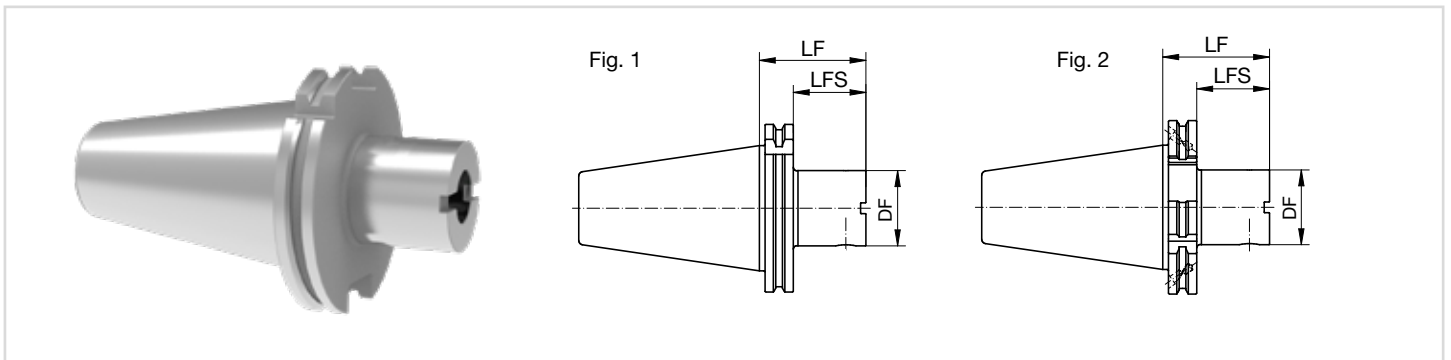
DIN 69893-HSK-A

Dimensions (mm)

System Size	Size	Stock	Cat. No.	DF	LFS	LF	Weight (kg)	Fig
SRE 150 - 200	HSK63	●	SRAH10-63A-101-120	76	94	120	2.4	2
SRE 150 - 200	HSK100	●	SRAH10-100A-101-130	76	101	130	5	2

* Coolant tube is not included

Beta-Module



DIN 69871-AD

Dimensions (mm)

Size	Beta	Stock	Cat. No.	DF	LFS	LF	DCON	Weight (kg)	Fig
SK50	63	●	BD10-50A-63-060	63	41	60	BM-63	3.3	1
	80	●	BD10-50A-80-070	80	51	70	BM-80	4.0	1
	100	●	BD10-50A-100-115	100	96	115	BM-100	6.9	1

DIN 69871-B

Abmaße (mm)

Size	Beta	Stock	Cat. No.	DF	LFS	LF	DCON	Weight (kg)	Fig
SK50	63	●	BD10-50B-63-060	63	41	60	BM-63	3.3	2
	100	●	BD10-50B-100-115	100	96	115	BM-100	6.9	2

●: Stock Europe

SR Reamer Large

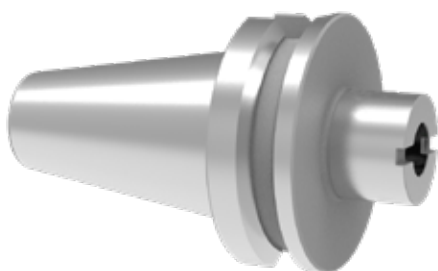


Fig. 1

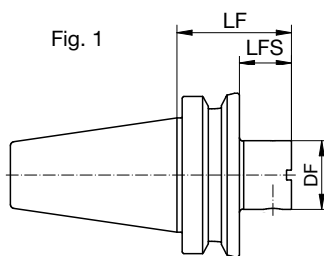
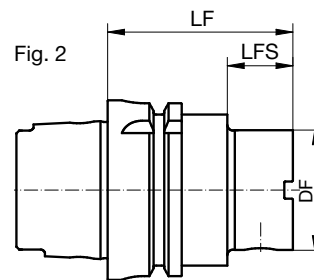


Fig. 2



MAS-BT JIS 6339-AD

Dimensions (mm)

Size	Beta	Stock	Cat. No.	DF	LFS	LF	DCON	Weight (kg)	Fig
BT50	63	●	BT10-50A-63-080	63	42	80	BM-63	4.3	1
	80	●	BT10-50A-80-100	80	62	100	BM-80	5.5	1
	100	●	BT10-50A-100-110	100	72	110	BM-100	7.0	1

DIN 69893-HSK-A

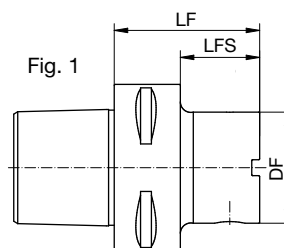
Dimensions (mm)

Size	Beta	Stock	Cat. No.	DF	LFS	LF	DCON	Weight (kg)	Fig
HSK100	63	●	BH10-100A-63-080	63	35	80	BM-63	4.3	2
	80	●	BH10-100A-80-090	80	45	90	BM-80	5.5	2
	100	●	BH10-100A-100-100	100	55	100	BM-100	7.0	2

* Coolant tube is not included



Fig. 1

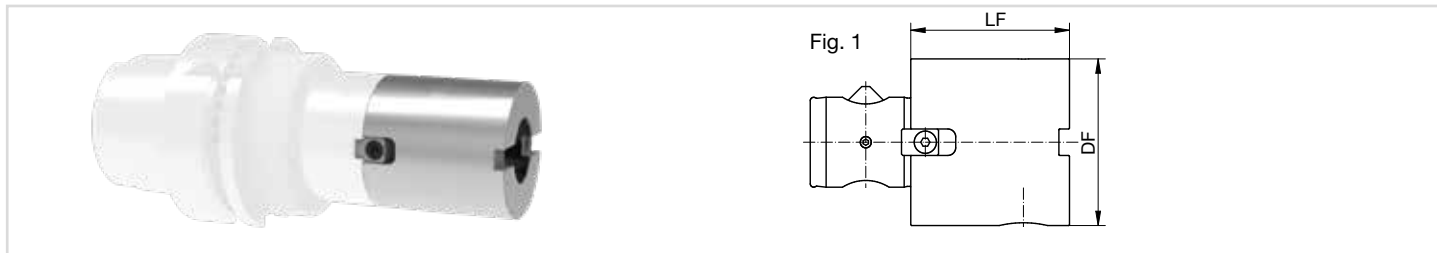


ISO 26623-1-PSC

Dimensions (mm)

Size	Beta	Stock	Cat. No.	DF	LFS	LF	DCON	Weight (kg)	Fig
PSC63	63	●	BC10-63-63-065	63	40	65	BM-63	1.5	1
PSC63	63	●	BC10-80-63-065	63	35	65	BM-63	2.3	1

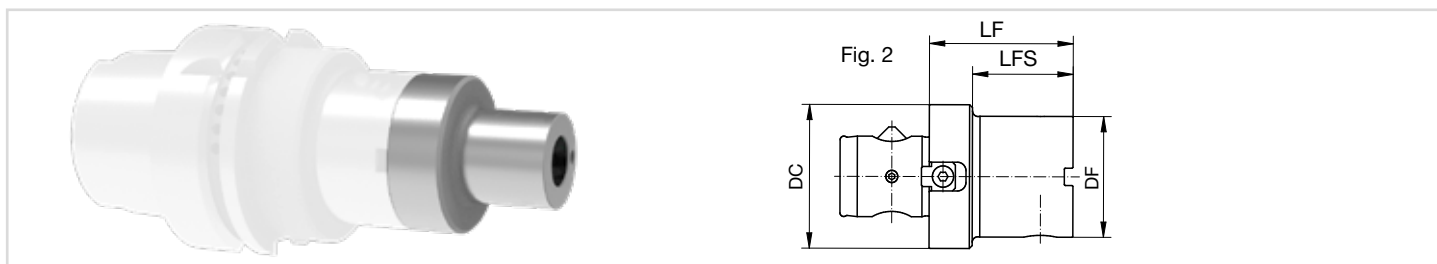
Extensions and Reductions



Extensions Beta-Module

Dimensions (mm)

Beta	Stock	Cat. No.	DF	LF	Hole Dia.	DCON	Weight (kg)	Fig
63	●	B13-63-63-060	63	60	BM-63	BM-63	1.3	1
	●	B13-63-63-125	63	125	BM-63	BM-63	2.9	1
80	●	B13-80-80-080	80	80	BM-80	BM-80	2.9	1
	●	B13-80-80-160	80	160	BM-80	BM-80	6.0	1
100	●	B13-100-100-080	100	80	BM-100	BM-100	4.9	1
	●	B13-100-100-180	100	180	BM-100	BM-100	10.9	1



Reducers Beta-Module

Dimensions (mm)

Beta 1	Beta 2	Stock	Cat. No.	DF	DC	LFS	LF	Hole Dia.	DCON	Weight (kg)	Fig
80	63	●	B12-80-63-060	63	80	35	60	BM-80	BM-63	2.4	2
100	63	●	B12-100-63-060	63	100	35	60	BM-100	BM-63	3.3	2
100	80	●	B12-100-80-075	80	100	50	75	BM-100	BM-80	3.5	2

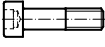
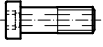
Recommended Cutting Conditions

ISO	Material description	Type	Cutting speed Vc (m/min)	Feed fz (mm/t)	measurement Ap (mm)			
					SR Small	SR Medium		SR Large
					Ø 7.6 - 13.1	Ø 11.9 - 35.6	Ø 35.6 - 140.6	Ø 139.8 - 200.2
P	free cutting steels, case-hardening steels, low-alloy construction steels C < 0.25%	T1200A	140 - 220	0.15 - 0.25	0.05 - 0.10	0.07 - 0.12	0.07 - 0.15	0.08 - 0.20
		F0512R1	120 - 200	0.15 - 0.25	0.05 - 0.10	0.07 - 0.12	0.07 - 0.15	0.08 - 0.20
	heat-treatable steels, construction steels C > 0.25%	T1200A	140 - 200	0.15 - 0.25	0.05 - 0.10	0.07 - 0.12	0.07 - 0.15	0.08 - 0.20
		F0512R1	120 - 180	0.15 - 0.25	0.05 - 0.10	0.07 - 0.12	0.07 - 0.15	0.08 - 0.20
	spring and bearing steels, hardenable steels C > 0.67%	F0512R1	70 - 120	0.14 - 0.22	0.05 - 0.08	0.07 - 0.12	0.07 - 0.12	0.07 - 0.12
M	High alloyed steels	F0512R1	15 - 35	0.07 - 0.12	0.05 - 0.08	0.07 - 0.12	0.07 - 0.12	0.07 - 0.12
	Ferritic-, Martensitic- and Austenitic stainless steels	F0512R1	50 - 80	0.12 - 0.20	0.05 - 0.10	0.07 - 0.12	0.07 - 0.12	0.07 - 0.12
	alloyed austenitic stainless steel	F0512R1	30 - 60	0.08 - 0.15	0.05 - 0.08	0.05 - 0.10	0.07 - 0.12	0.07 - 0.12
	High-alloy austenitic, Duplex and super Duplex stainless steel	F0512R1	15 - 30	0.06 - 0.12	0.05 - 0.08	0.05 - 0.10	0.07 - 0.12	0.07 - 0.12
	Grey cast irons	F0514R2	80 - 140	0.14 - 0.25	0.10 - 0.16	0.10 - 0.20	0.10 - 0.20	0.12 - 0.25
K	Ductil and malleable cast irons	F0514R2	100 - 160	0.14 - 0.25	0.07 - 0.12	0.08 - 0.15	0.10 - 0.20	0.10 - 0.20
	Heat-treated ductile cast iron (ADI) Vermicular cast iron	F0514R2	50 - 90	0.12 - 0.22	0.07 - 0.12	0.08 - 0.15	0.10 - 0.20	0.10 - 0.20
N	Aluminum alloys, Si < 7%	F0510C	180 - 300	0.15 - 0.30	0.05 - 0.12	0.05 - 0.12	0.08 - 0.15	0.08 - 0.15
	Aluminum alloys, Si > 7%	F0521C	150 - 280	0.15 - 0.30	0.05 - 0.12	0.05 - 0.12	0.05 - 0.15	0.05 - 0.15
	Copper alloys, good machinability	F0521C	140 - 200	0.15 - 0.25	0.05 - 0.12	0.05 - 0.12	0.05 - 0.15	0.05 - 0.15
	Copper alloys, more difficult machinability	F0521C	50 - 100	0.12 - 0.22	0.05 - 0.12	0.05 - 0.12	0.05 - 0.15	0.05 - 0.15
S	Iron based superalloys	F0512R1	20 - 40	0.06 - 0.12	0.05 - 0.10	0.05 - 0.10	0.05 - 0.12	0.05 - 0.12
	Cobalt/Nickel based superalloys	F0512R1	15 - 30	0.05 - 0.10	0.05 - 0.08	0.05 - 0.10	0.05 - 0.10	0.05 - 0.10
	Titanium, low alloyed	F0512R1	25 - 50	0.06 - 0.12	0.05 - 0.10	0.05 - 0.10	0.05 - 0.12	0.05 - 0.12
	Titanium, high alloyed	F0512R1	15 - 30	0.05 - 0.10	0.05 - 0.08	0.05 - 0.10	0.05 - 0.10	0.05 - 0.10
H	Hardened Steels HRC 45 - 52	F0507R1	15 - 30	0.06 - 0.12	0.05 - 0.08	0.05 - 0.10	0.05 - 0.10	0.05 - 0.10
	Hardened Steels HRC 53 - 57	F0507R1	10 - 20	0.04 - 0.08	0.04 - 0.07	0.04 - 0.08	0.05 - 0.10	0.05 - 0.10
	Hardened Steels HRC 58 - 62	F0507R1	8 - 15	0.04 - 0.08	0.04 - 0.07	0.04 - 0.07	0.05 - 0.10	0.05 - 0.10

We exclude any liability for the accuracy and completeness of the cutting data listed.

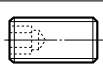
• Accessories/Spare parts - SumiReamer Small/Medium

Spare screw for SRSD/SRSB Holder

System size	SRSD/SRD	SRSB/SRB
		
SRS 08	C00-90-51	C00-90-51
SRS 10	C00-90-52	C00-90-52
SRS 11	C00-90-53	C00-90-53B
SRS 13	C00-90-54	C00-90-54B
SR 16	C00-90-00	C00-90-00
SR 19	C00-90-00	C00-90-00
SR 24	C00-90-01	C00-90-01
SR 29	C00-90-01	C00-90-01
SR 36	C00-90-01	C00-90-01

*SRSD/SRSB: Small, SRD/SRB: Medium

Spare parts Compensation Sleeve

System size	Adjusting screw	O-Ring	Wrench
			
SRS 08	C00-96-32	D00-05-00	G00-02-03
SRS 10	C00-96-32	D00-05-00	G00-02-03
SRS 11	C00-96-32	D00-05-01	G00-02-03
SRS 13	C00-96-32	D00-05-01	G00-02-03
SR 16	C00-96-29	D00-05-03	G00-02-04
SR 19	C00-96-29	D00-05-04	G00-02-04
SR 24	C00-96-29	D00-05-02	G00-02-04
SR 29	C00-96-31	D00-05-05	G00-02-05
SR 36	C00-96-31	D00-05-06	G00-02-05

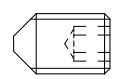
Run-Out adjusting head

System size	Article Nr.
SRS 08	SRSC08-06-02
SRS 10	SRSC10-06-02
SRS 11	SRSC11-06-03
SRS 13	SRSC13-06-03
SR 16	SRC016
SR 19	SRC019
SR 24	SRC024
SR 29	SRC029
SR 36	SRC036

Spare screw for SRD-SD/SRB-SD Holder

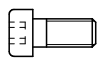
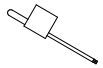
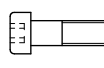
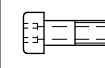
System size	SRD-SD	SRB-SD
		
SR 16	C00-90-22	C00-90-22
SR 19	C00-90-23	C00-90-23B
SR 24	C00-90-24	C00-90-24B
SR 29	C00-90-24	C00-90-24B
SR 36	C00-90-25	C00-90-25B

Spare parts hydro-Compensation Chuck

Adjusting screw for hydraulic-compensation chuck TENDOzero.	
9954676	

• Accessoires/Spare parts - SumiReamer Medium/Large

Spare parts for SRKG/SRKB cutting holders

System size	Screw	Wrench	Center Screw		Wrench
			SRKG	SRGB	
					
SR 44	C00-90-02	G00-20-02	C00-26-23	C00-26-23B	G00-02-07
SR 52	C00-90-02	G00-20-02	C00-26-38	C00-26-38B	G00-02-07
SR 61	C00-90-02	G00-20-02	C00-24-26	C00-24-26B	G00-02-08
SR 81	C00-90-04	G00-20-03	C00-26-37	C00-26-37B	G00-02-09
SR 101	C00-90-04	G00-20-03	C00-24-31	C00-24-31B	G00-02-16
SR 121	C00-90-04	G00-20-03	C00-24-31	C00-24-31B	G00-02-16
SR 141	C00-90-04	G00-20-03	C00-24-31	C00-24-31B	G00-02-16
SRE 150-200	C00-22-07	-	-	-	G00-02-05
	-	-	C00-24-34	-	G00-02-16

Spare parts for SRAD/SRAT/SRAH admission

System size	Screw	Wrench
		
SR 44	C00-90-08	G00-02-05
SR 52	C00-90-10	G00-02-06
SR 61	C00-90-10	G00-02-06
SR 81	C00-90-12	G00-02-07
SR 101	C00-90-16	G00-02-08
SR 121	C00-90-16	G00-02-08
SR 141	C00-90-16	G00-02-08
SRE 150-200	C00-90-16	G00-02-08

Coolant tube
for SRAK Holder

System size	Size	
SR 44	HSK-A63	H006301
SR 52		
SR 61		
SR 81		
SR 101	HSK-A100	H0010001
SR 121		
SR 141		
SRE 150-200		

Spare parts for SRA lengthening shafts

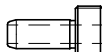
System size	Screw	Wrench	Pin	Positioning pin
				
SR 44	C009008	G000205	Z003221	Z003223
SR 52	C009010	G000206	Z004021	Z004023
SR 61	C009010	G000206	Z005021	Z005023
SR 81	C009012	G000207	Z005021	Z005023
SR 101	C009016	G000208	Z006321	Z006323
SR 121	C009016	G000208	Z006321	Z006323
SR 141	C009016	G000208	Z006321	Z006323
SRE 150-200	C009016	G000208	Z006321	Z006323

● Accessoires/Spare parts

Spare parts for B12/B13 Reduction/Lengthening Beta-Modul

Beta	Screw	Pin	Positioning pin	Groove stone	Screw
					
25	Z002524	Z002521	Z002523	-	-
32	Z003224	Z003221	Z003223	-	-
40	Z004024	Z004021	Z004023	Z004025	C002258
50	Z005024	Z005021	Z005023	Z005023	C002260
63	Z006324	Z006321	Z006323	Z006323	C002205
80	Z008024	Z008021	Z008023	Z008023	C002207
100	Z0010024	Z0010021	Z0010023	Z0010023	C002271

Coolant tube for
HSK-Admissions

Beta	Size	
-		
32	HSK-A50 HSK-A63 HSK-A100	H00-50-01 H00-63-01 H00-100-01
40		
50		
63		
80		
100		

Spare parts for BD10/
BT10/BH10
Systemadmission
Beta-Module

Beta	
-	-
32	Z00-32-24
40	Z00-40-24
50	Z00-50-24
63	Z00-63-24
80	Z00-80-24
100	Z00-100-24

Torx-Torque wrench

System size	Article No.	Torx Size	
SRS 08	G00-40-15	T6	0.6
SRS 10	G00-40-14	T7	0.9
SRS 11	G00-40-16	T9	1.4
SR 13	G00-40-17	T10	2
SR 16	G00-40-11	T6	0.9
SR 19	G00-40-11	T6	0.9
SR 24	G00-40-12	T8	1.5
SR 29	G00-40-12	T8	1.5
SR 36	G00-40-12	T8	1.5
SR 44	G00-40-12	T8	1.5
SR 52	G00-40-12	T8	1.5
SR 61	G00-40-12	T8	1.5
SR 81	G00-40-13	T15	3.5
SR 101	G00-40-13	T15	3.5
SR 121	G00-40-13	T15	3.5
SR 141	G00-40-13	T15	3.5



SR Reamer - Application examples

Truck engine-Piston holes

Ø 45H7 x 73 mm | 0.6025 / EN-GJL-250

Reamer: SR Medium

Insert: SR 44, HM coated

Cutting data:

Vc (m/min)	140
fz (mm/t)	0.20
z	10
Vf (mm/min)	1980
ap (mm)	0.15

Requirements:

Surface Rz (µm)	6.3
Circularity (µm)	10

Tool life	1,500 Holes
------------------	-------------



Connecting rod-small eye

Ø 25H7 x 20 mm | 1.0615 / C70, forged

Reamer: SR Medium

Insert: SR 29, Cermet uncoated

Cutting data:

Vc (m/min)	180
fz (mm/t)	0.15
z	8
Vf (mm/min)	2750
ap (mm)	0.12

Requirements:

Surface Rz (µm)	10
------------------------	----

Tool Life	10,000 Holes
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SR Reamer - Application examples

Aircraft landing gear

Ø 12H7 – Ø 60H7 | 3.4365 / EN-AW-7075

Reamer: SR Medium

Insert: SR 16 – SR 61, HM coated

Cutting Data:

Vc (m/min)	250
fz (mm/t)	0.26
ap (mm)	0.10

Requirements:

Surface Ra (µm)	6.3
Maximum process reliability	



Gearbox

Ø 150H7 x 45 mm | 0.6025 / EN-GJL-250

Reamer: SR Large

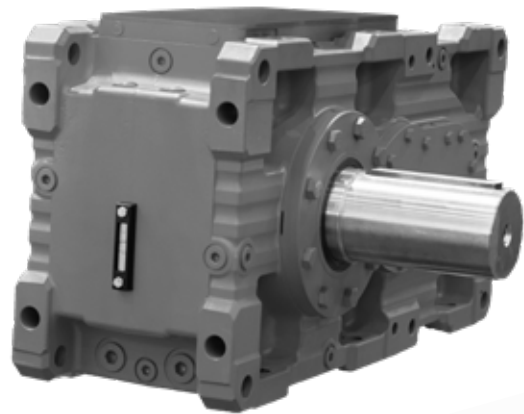
Insert: SRE 160, HM coated

Cutting data:

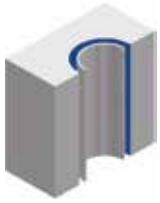
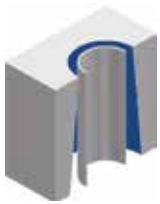
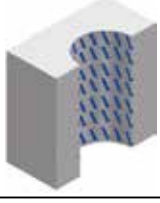
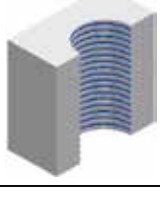
Vc (m/min)	140
fz (mm/t)	0.20
z	12
Vf (mm/min)	713
ap (mm)	0.12

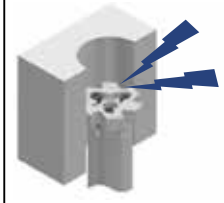
Requirements:

Surface Ra (µm)	3.2
Tool Life	2,500 Holes



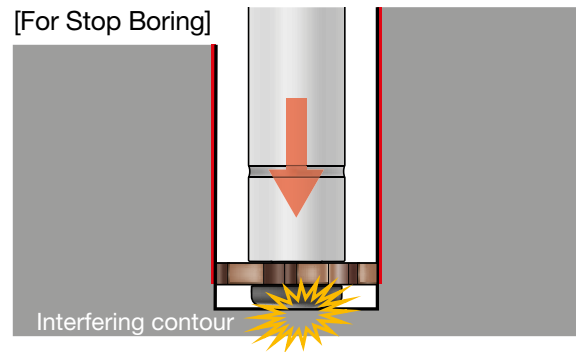
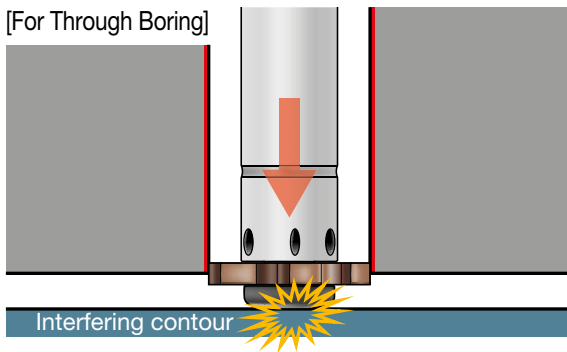
■ Troubleshooting

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). - Check the reamer diameter.
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.
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.
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.

Failure	Countermeasures
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.
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.
Small hole diameter 	- Replace the insert. - Decrease the coolant concentration. - Increase the stock removal. - Increase the cutting speed. - Decrease the feed rate.

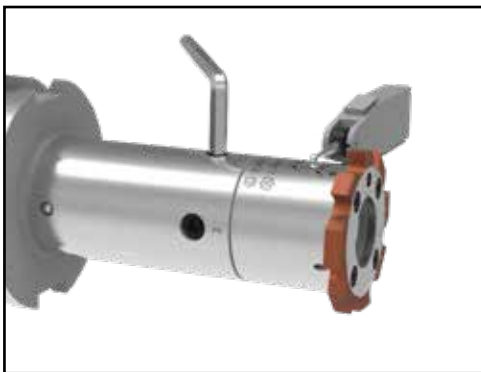
■ Precautions for SD (Center Bolt Clamp Type)

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.



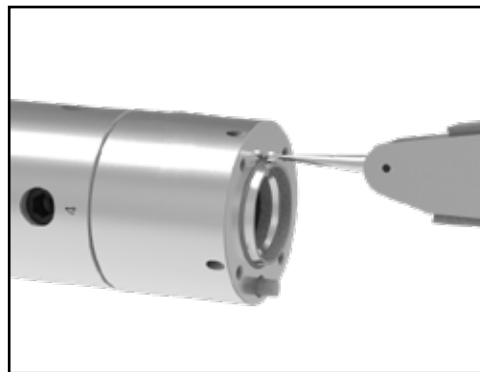
■ SR Reamer Usage Instructions (Adjusting Runout)

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 or shrink chucks are 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.



1. On the marked run-out area on the insert holder

RX medium tool holders are manufactured very accurately. This handling method is easy and offers reasonable measuring results.

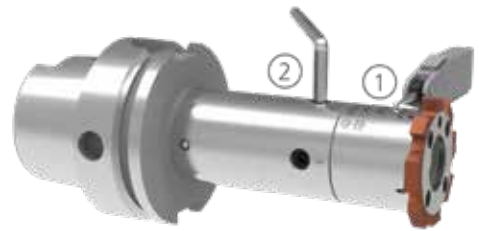


2. Through Insert Holder Short Taper

With the reamer disassembled, measure directly on the insert holders short taper. This handling method offers high accuracy measuring results.

■ Adjustment of the concentricity

1. Secure central clamping screw according to value “A” in the chart below (if not available, use value “B”).
2. Load the tool into the machine spindle.
3. Set the indicator (with 1 μm / 0.0001 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 value of the total run-out error by using the adjustment screws. Check run-out on all four axle points and repeat the adjustment if necessary. Tighten all screws that do not fit tightly, considering the run-out < 0.005 mm in diameter.
5. Tighten the central clamping screw according to table value “B”.
6. Check the run-out again and re-adjust if necessary.



System size	A [Nm]	B [Nm]
SR 44	-	35
SR 52	-	35
SR 61	-	55
SR 81	60	85
SR 101	70	120
SR 121	70	120
SR 141	70	120



Bearbeitungsstudie – Reiben / Ausdrehen

Machining Study – Reaming / Boring

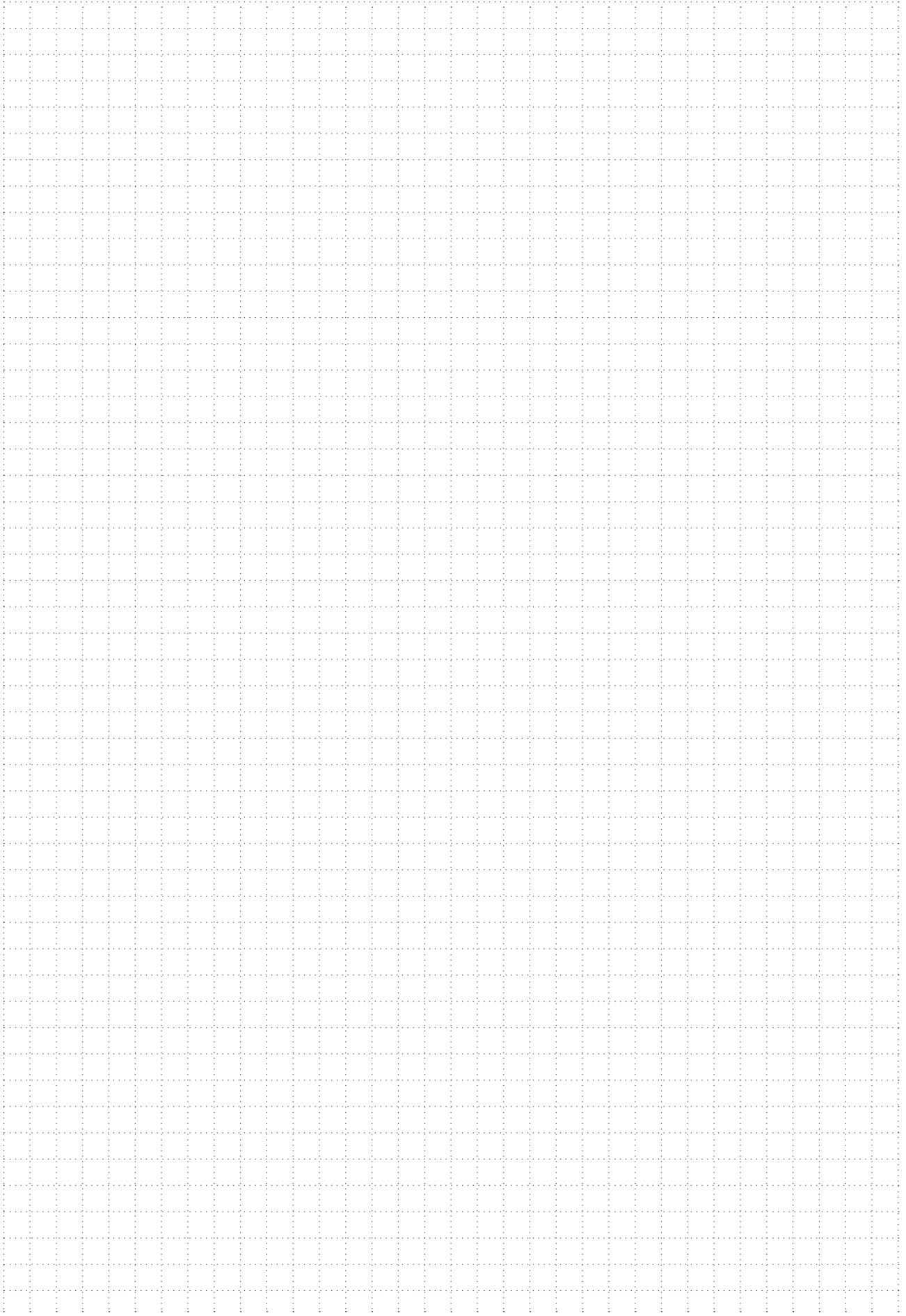


Absender Sender			Nummer Number		
Firma / Endkunde End user Company			Vertretung Distributor		
Adresse Address			Aussendienst Sales Contact		
Maschine Machine					
Hersteller und Typ Manufacturer and Model					
Horizontal Horizontal ☐		Vertikal Vertical ☐		Werkzeug rotierend Tool rotating ☐ yes ☐ no	
Spindelaufnahme Spindle adaptor		Grösse Size		Ausführung Type	
DIN 69893 – HSK ☐		20 ☐ 25 ☐		A ☐	
DIN 69871 – SK ☐		30 ☐ 32 ☐		B ☐	
JIS 6339 – MAS-BT ☐		40 ☐ 50 ☐		C ☐	
Zylinderschaft DIN 1835 ☐ Cylinder shank DIN 1835		63 ☐ 80 ☐		D ☐	
DIN 69880 – VDI ☐		100 ☐ ☐		E ☐	
..... ☐					
Kühlung Lubricant					
Öl ☐ MMS ¹⁾ ☐ Oil MQL ¹⁾		Emulsion ☐ Emulsion		Mischungsverhältnis Ratio of Mixture %	
Innere Kühlmittelzufuhr ☐ yes ☐ no Internal Coolant Supply				Kühlmitteldruck Coolant Pressure bar	
Werkstück Workpiece					
Bezeichnung Component Name		Werkstoffnummer Material Number		Behandlungszustand (Härte) Material Condition (Hardness)	
Bearbeitungsanforderungen Machining Requirements					
Ø Bohrung Ø Bore		Bohrungslänge Bore Length mm		Ø Vorbearbeitung Ø Pre-Machining mm	
Toleranz Tolerance		Störkonturen Interference Length mm		Vorbearbeitungsart Method of Pre-Machining	
Form- und Lagetoleranzen Geometrical Tolerances		☐ ☐ ☐		Sacklochbohrung ☐ yes ☐ no Blind Hole	
Oberflächengüte Surface Quality µm		R _a ☐ R _z ☐ R _t ☐		Schnittunterbrechung ☐ yes ☐ no Cutting Interruption	
Datum Date					
Bemerkungen Notes				Jährliche Produktion: Annual Production:	
				Dringlichkeit: Urgency:	

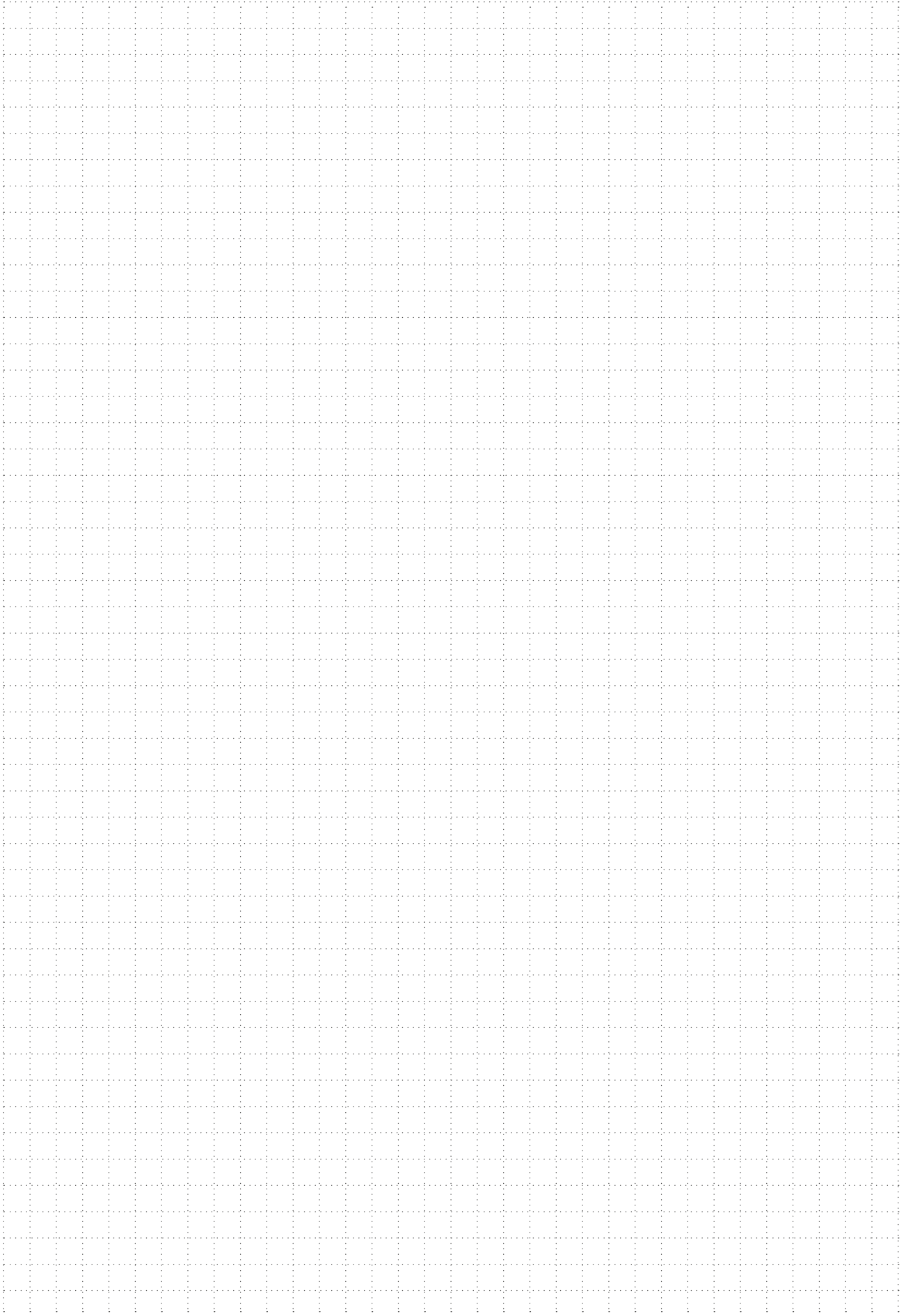
¹⁾ **Mindermengen-Schmierung**
Minimum Quantity Lubrication

Beilage: Werkstückzeichnung
Attachement: Part Drawing

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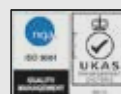




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