


Technical information 7

Application ID turning  294


Product lines and accuracy classes of UTILIS **STANDARD-LINE** 296

Center drills  298

Inserts  299

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Holder AKR-Mono  323

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Cutting specification 

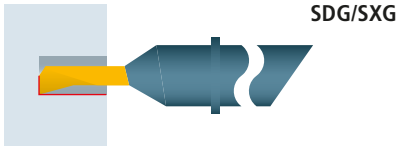
	Alpha 900 Alpha 910 Alpha 920 Alpha 930 Alpha 940 Alpha 950 Alpha 960 Alpha 970 Alpha 980 Alpha 990	Beta 1000 Beta 1010 Beta 1020 Beta 1030 Beta 1040 Beta 1050 Beta 1060 Beta 1070 Beta 1080 Beta 1090	Gamma 1100 Gamma 1110 Gamma 1120 Gamma 1130 Gamma 1140 Gamma 1150 Gamma 1160 Gamma 1170 Gamma 1180 Gamma 1190	Delta 1200 Delta 1210 Delta 1220 Delta 1230 Delta 1240 Delta 1250 Delta 1260 Delta 1270 Delta 1280 Delta 1290	Epsilon 1300 Epsilon 1310 Epsilon 1320 Epsilon 1330 Epsilon 1340 Epsilon 1350 Epsilon 1360 Epsilon 1370 Epsilon 1380 Epsilon 1390	Zeta 1400 Zeta 1410 Zeta 1420 Zeta 1430 Zeta 1440 Zeta 1450 Zeta 1460 Zeta 1470 Zeta 1480 Zeta 1490
Material	1	2	3	4	5	6
Condition	✓	✓	✓	✓	✓	✓
Application	✓	✓	✓	✓	✓	✓
Working method	✓	✓	✓	✓	✓	✓

 325

Accessories  533

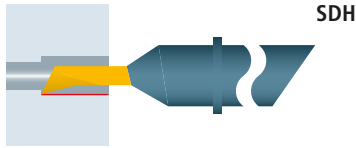
Drilling and Turning

Inserts 300...



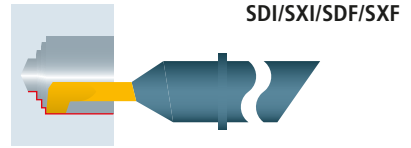
Front turning

Inserts 306...



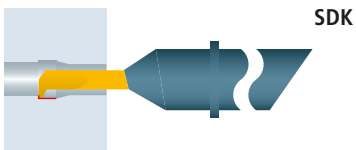
Turning and facing

Inserts 302...



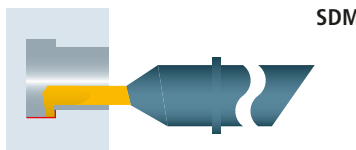
Turning and front turning

Inserts 307...



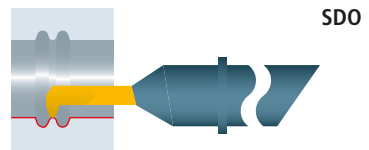
Back turning

Inserts 308...



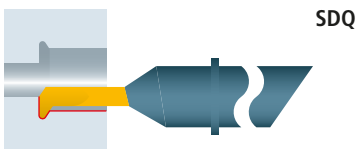
Turning

Inserts 309...



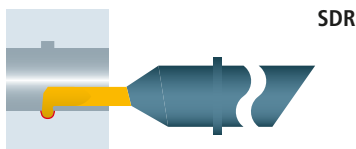
Turning

Inserts 310...



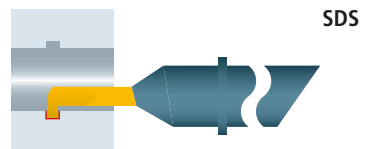
Radius-grooving

Inserts 311...



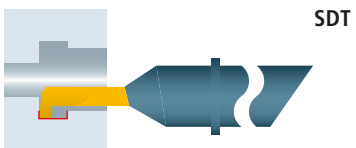
Grooving

Inserts 312...



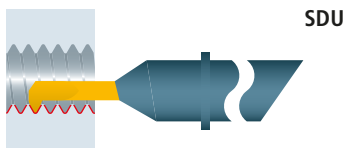
Grooving and Turning

Inserts 313...



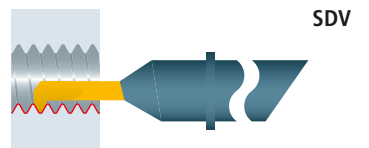
Threading (partial profile)

Inserts 314...



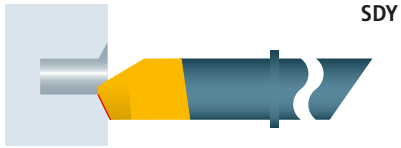
Threading (full profile)

Inserts 315...



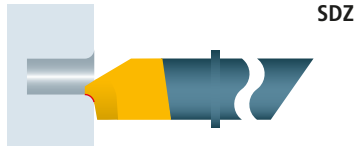
Chamfering

Inserts [□ 318...](#)



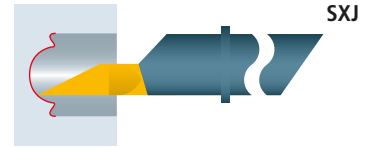
Radius

Inserts [□ 319...](#)



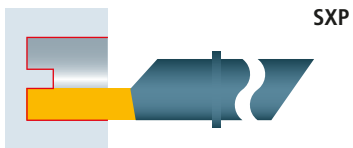
Copy turning (axial)

Inserts [□ 316...](#)



Grooving (axial)

Inserts [□ 317...](#)



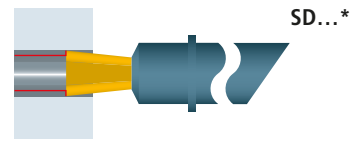
Center drilling

Inserts [□ 298](#)



Special inserts/broaching (on demand)

Inserts



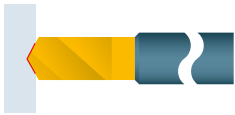
\*  $\varnothing < 2.5$ : SD - 4  
 $\varnothing > 2.5$ : SD - 6  
 $\varnothing > 4$ : SD - 8

Holders [□ 320...](#)

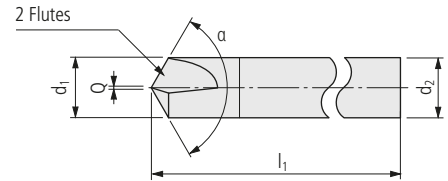
All illustrations show right hand design. Left hand design is also available.

Product line	Accuracy class of UTILIS	Repeatability
<b>PREMIUM-LINE</b>		< 10 μm
<b>STANDARD-LINE</b>		< 20 μm
<b>BUDGET-LINE</b>		< 50 μm





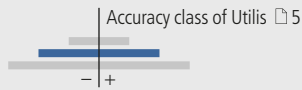
Center drilling



DRP ...

Order designation	Carbide		Dimensions										
	UHM 20	UHM 20 HX	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	Q	α						
R	○	●											
	○	●											
	○	●											
	●	○											

**STANDARD-LINE**



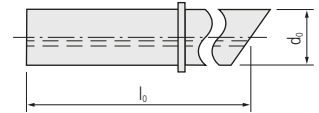
DRP 338 090 R ...	■	■	3	3	38	0.04	90°						
DRP 338 120 R ...	■	■	3	3	38	0.04	120°						
DRP 338 140 R ...	■	■	3	3	38	0.04	140°						
DRP 442 090 R ...	■	■	4	4	42	0.05	90°						
DRP 442 120 R ...	■	■	4	4	42	0.05	120°						
DRP 442 140 R ...	■	■	4	4	42	0.05	140°						
DRP 650 090 R ...	■	■	6	6	50	0.06	90°						
DRP 650 120 R ...	■	■	6	6	50	0.06	120°						
DRP 650 140 R ...	■	■	6	6	50	0.06	140°						

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UTILIS  
**multidec**<sup>®</sup>  
swiss type tools



Blank

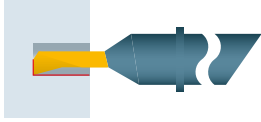


SD ...

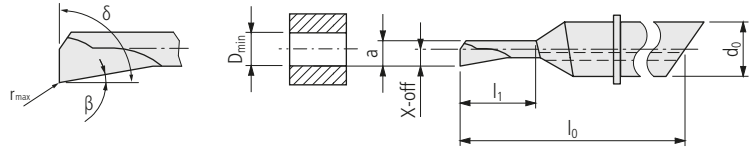
Order designation	Carbide	15	Dimensions											Holder		
R	○		d <sub>0</sub>	l <sub>0</sub>												320...
	○															
	○															
	●															
	UHM 20															
Accuracy class of Utilis 5																
-   +																
SD 448 R ...	■		4	48											SDA 4...	
SD 668 R ...	■		6	68											SDA 6...	
SD 882 R ...	■		8	82											SDA 8...	

**PREMIUM-LINE**

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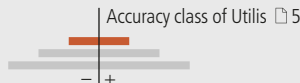
Drilling and turning



SDG ...

Order designation	Carbide		Dimensions											Holder
	UHM 20	UHM 20 HX	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	l <sub>0</sub>	r <sub>max</sub>	β	δ			

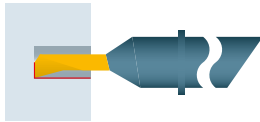
**PREMIUM-LINE**



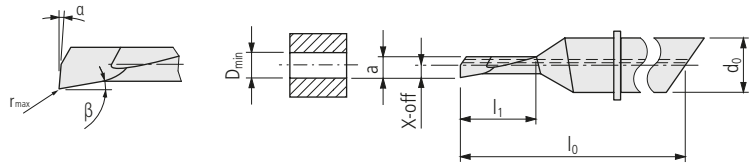
SDG 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	35	0.01	2.5°	89.5°				SDA 4...
SDG 435 052 R ...	■	■	0.52	2	4	0.47	0.26	35	0.02	2.5°	89.5°				SDA 4...
SDG 435 072 R ...	■	■	0.72	2.5	4	0.65	0.36	35	0.03	2.5°	89.5°				SDA 4...
SDG 435 092 R ...	■	■	0.92	3	4	0.83	0.46	35	0.02	2.5°	89.5°				SDA 4...
SDG 440 092 R ...	■	■	0.92	3	4	0.83	0.46	40	0.03	2.5°	89.5°				SDA 4...
SDG 448 092 R ...	■	■	0.92	5	4	0.83	0.46	48	0.03	2.5°	89.5°				SDA 4...
SDG 435 122 R ...	■	■	1.22	4	4	1.10	0.61	35	0.03	2.5°	89.5°				SDA 4...
SDG 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	35	0.02	2.5°	89.5°				SDA 4...
SDG 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	40	0.04	2.5°	89.5°				SDA 4...
SDG 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	48	0.04	2.5°	89.5°				SDA 4...
SDG 435 192 R ...	■	■	1.92	6	4	1.73	0.96	35	0.03	2.5°	89.5°				SDA 4...
SDG 440 192 R ...	■	■	1.92	6	4	1.73	0.96	40	0.04	2.5°	89.5°				SDA 4...
SDG 448 192 R ...	■	■	1.92	10	4	1.73	0.96	48	0.04	2.5°	89.5°				SDA 4...
SDG 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	35	0.03	2.5°	89.5°				SDA 4...
SDG 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	40	0.05	2.5°	89.5°				SDA 4...
SDG 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	48	0.05	2.5°	89.5°				SDA 4...
SDG 440 292 R ...	■	■	2.92	9	4	2.63	1.46	40	0.05	2.5°	89.5°				SDA 4...
SDG 448 292 R ...	■	■	2.92	15	4	2.63	1.46	48	0.05	2.5°	89.5°				SDA 4...
SDG 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	40	0.06	2.5°	89.5°				SDA 4...
SDG 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	48	0.06	2.5°	89.5°				SDA 4...
SDG 440 392 R ...	■	■	3.92	12	4	3.53	1.96	40	0.06	2.5°	89.5°				SDA 4...
SDG 448 392 R ...	■	■	3.92	20	4	3.53	1.96	48	0.06	2.5°	89.5°				SDA 4...
SDG 644 442 R ...	■	■	4.42	9	6	3.98	2.21	44	0.07	2.5°	89.5°				SDA 6...
SDG 656 442 R ...	■	■	4.42	18	6	3.98	2.21	56	0.07	2.5°	89.5°				SDA 6...
SDG 668 442 R ...	■	■	4.42	27	6	3.98	2.21	68	0.07	2.5°	89.5°				SDA 6...
SDG 644 492 R ...	■	■	4.92	10	6	4.43	2.46	44	0.07	2.5°	89.5°				SDA 6...
SDG 656 492 R ...	■	■	4.92	20	6	4.43	2.46	56	0.07	2.5°	89.5°				SDA 6...
SDG 668 492 R ...	■	■	4.92	30	6	4.43	2.46	68	0.07	2.5°	89.5°				SDA 6...
SDG 644 542 R ...	■	■	5.42	11	6	4.88	2.71	44	0.08	2.5°	89.5°				SDA 6...
SDG 656 542 R ...	■	■	5.42	22	6	4.88	2.71	56	0.08	2.5°	89.5°				SDA 6...
SDG 668 542 R ...	■	■	5.42	33	6	4.88	2.71	68	0.08	2.5°	89.5°				SDA 6...
SDG 644 592 R ...	■	■	5.92	12	6	5.33	2.96	44	0.08	2.5°	89.5°				SDA 6...
SDG 656 592 R ...	■	■	5.92	24	6	5.33	2.96	56	0.08	2.5°	89.5°				SDA 6...
SDG 668 592 R ...	■	■	5.92	36	6	5.33	2.96	68	0.08	2.5°	89.5°				SDA 6...
SDG 850 692 R ...	■	■	6.92	14	8	6.23	3.46	50	0.09	2.5°	89.5°				SDA 8...
SDG 866 692 R ...	■	■	6.92	28	8	6.23	3.46	66	0.09	2.5°	89.5°				SDA 8...
SDG 882 692 R ...	■	■	6.92	42	8	6.23	3.46	82	0.09	2.5°	89.5°				SDA 8...
SDG 850 792 R ...	■	■	7.92	16	8	7.13	3.96	50	0.1	2.5°	89.5°				SDA 8...
SDG 866 792 R ...	■	■	7.92	32	8	7.13	3.96	66	0.1	2.5°	89.5°				SDA 8...
SDG 882 792 R ...	■	■	7.92	48	8	7.13	3.96	82	0.1	2.5°	89.5°				SDA 8...

\* Left execution and other coatings on demand





**Drilling and turning**  
Strengthen type (for blind holes)



SXG ...

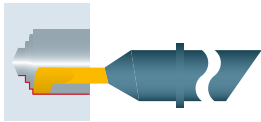
Order designation	Carbide		Dimensions	Holder																	
	□ 15	□ 15		□ 320...																	
R	○	●	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	l <sub>0</sub>	r <sub>max</sub>	α	β										
	UHM 20	UHM 20 HX																			

**PREMIUM-LINE**

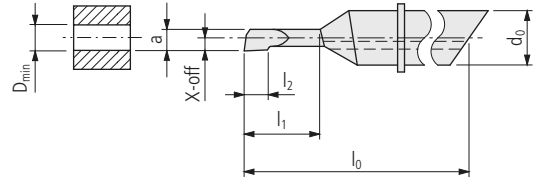
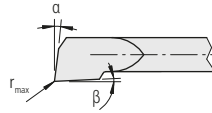
Accuracy class of Utilis □ 5

SXG 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	35	0.02	2.5°	2.5°											SDA 4...
SXG 435 052 R ...	■	■	0.52	2	4	0.47	0.26	35	0.02	2.5°	89.5°											SDA 4...
SXG 435 072 R ...	■	■	0.72	2.5	4	0.65	0.36	35	0.03	2.5°	89.5°											SDA 4...
SXG 435 092 R ...	■	■	0.92	3	4	0.83	0.46	35	0.02	0.5°	2.5°											SDA 4...
SXG 435 122 R ...	■	■	1.22	4	4	1.10	0.61	35	0.03	2.5°	89.5°											SDA 4...
SXG 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	35	0.02	0.5°	2.5°											SDA 4...
SXG 435 192 R ...	■	■	1.92	6	4	1.73	0.96	35	0.02	0.5°	2.5°											SDA 4...
SXG 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	35	0.02	0.5°	2.5°											SDA 4...
SXG 440 292 R ...	■	■	2.92	9	4	2.63	1.46	40	0.02	0.5°	2.5°											SDA 4...
SXG 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	40	0.02	0.5°	2.5°											SDA 4...
SXG 440 392 R ...	■	■	3.92	12	4	3.53	1.96	40	0.02	0.5°	2.5°											SDA 4...
SXG 440 092 R ...	■	■	0.92	5	4	0.83	0.46	40	0.02	0.5°	2.5°											SDA 4...
SXG 440 142 R ...	■	■	1.42	7.5	4	1.28	0.71	40	0.02	0.5°	2.5°											SDA 4...
SXG 440 192 R ...	■	■	1.92	10	4	1.73	0.96	40	0.02	0.5°	2.5°											SDA 4...
SXG 440 242 R ...	■	■	2.42	12.5	4	2.18	1.21	40	0.02	0.5°	2.5°											SDA 4...
SXG 448 292 R ...	■	■	2.92	15	4	2.63	1.46	48	0.02	0.5°	2.5°											SDA 4...
SXG 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	48	0.02	0.5°	2.5°											SDA 4...
SXG 448 392 R ...	■	■	3.92	20	4	3.53	1.96	48	0.02	0.5°	2.5°											SDA 4...
SXG 644 442 R ...	■	■	4.42	9	6	3.98	2.21	44	0.02	0.5°	2.5°											SDA 6...
SXG 644 492 R ...	■	■	4.92	10	6	4.43	2.46	44	0.02	0.5°	2.5°											SDA 6...
SXG 644 542 R ...	■	■	5.42	11	6	4.88	2.71	44	0.02	0.5°	2.5°											SDA 6...
SXG 644 592 R ...	■	■	5.92	12	6	5.33	2.96	44	0.02	0.5°	2.5°											SDA 6...
SXG 656 442 R ...	■	■	4.42	18	6	3.98	2.21	56	0.02	0.5°	2.5°											SDA 6...
SXG 656 492 R ...	■	■	4.92	20	6	4.43	2.46	56	0.02	0.5°	2.5°											SDA 6...
SXG 656 542 R ...	■	■	5.42	22	6	4.88	2.71	56	0.02	0.5°	2.5°											SDA 6...
SXG 656 592 R ...	■	■	5.92	24	6	5.33	2.96	56	0.02	0.5°	2.5°											SDA 6...
SXG 668 442 R ...	■	■	4.42	27	6	3.98	2.21	68	0.02	0.5°	2.5°											SDA 6...
SXG 668 492 R ...	■	■	4.92	30	6	4.43	2.46	68	0.02	0.5°	2.5°											SDA 6...
SXG 668 542 R ...	■	■	5.42	33	6	4.88	2.71	68	0.02	0.5°	2.5°											SDA 6...
SXG 668 592 R ...	■	■	5.92	36	6	5.33	2.96	68	0.02	0.5°	2.5°											SDA 6...
SXG 850 692 R ...	■	■	6.92	14	8	6.23	3.46	50	0.02	0.5°	2.5°											SDA 8...
SXG 850 792 R ...	■	■	7.92	16	8	7.13	3.96	50	0.02	0.5°	2.5°											SDA 8...
SXG 866 692 R ...	■	■	6.92	28	8	6.23	3.46	66	0.02	0.5°	2.5°											SDA 8...
SXG 866 792 R ...	■	■	7.92	32	8	7.13	3.96	66	0.02	0.5°	2.5°											SDA 8...
SXG 882 692 R ...	■	■	6.92	42	8	6.23	3.46	82	0.02	0.5°	2.5°											SDA 8...
SXG 882 792 R ...	■	■	7.92	48	8	7.13	3.96	82	0.02	0.5°	2.5°											SDA 8...

\* Left execution and other coatings on demand



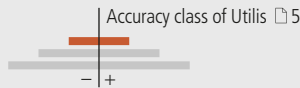
Turning and facing



SDI ...

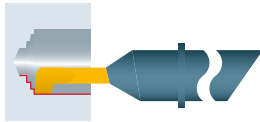
Order designation	Carbide		15	Dimensions											Holder 320...
	UHM 20	UHM 20 HX		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	l <sub>0</sub>	l <sub>2</sub>	r <sub>max</sub>	α	β		

**PREMIUM-LINE**

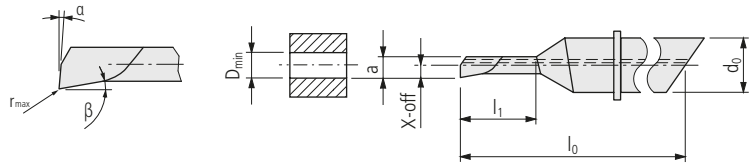


SDI 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	35	0.5	0.01	0.5°	2.5°			SDA 4...
SDI 435 052 R ...	■	■	0.52	2	4	0.47	0.26	35	0.6	0.02	0.5°	2.5°			SDA 4...
SDI 435 072 R ...	■	■	0.72	2.5	4	0.65	0.36	35	0.8	0.02	0.5°	2.5°			SDA 4...
SDI 435 092 R ...	■	■	0.92	3	4	0.83	0.46	35	1	0.02	0.5°	2.5°			SDA 4...
SDI 440 092 R ...	■	■	0.92	3	4	0.83	0.46	40	1	0.02	0.5°	2.5°			SDA 4...
SDI 448 092 R ...	■	■	0.92	5	4	0.83	0.46	48	1	0.02	0.5°	2.5°			SDA 4...
SDI 435 122 R ...	■	■	1.22	4	4	1.10	0.61	35	1.3	0.02	0.5°	2.5°			SDA 4...
SDI 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	35	1.5	0.02	0.5°	2.5°			SDA 4...
SDI 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	40	1.5	0.02	0.5°	2.5°			SDA 4...
SDI 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	48	1.5	0.02	0.5°	2.5°			SDA 4...
SDI 435 192 R ...	■	■	1.92	6	4	1.73	0.96	35	2	0.03	0.5°	2.5°			SDA 4...
SDI 440 192 R ...	■	■	1.92	6	4	1.73	0.96	40	2	0.02	0.5°	2.5°			SDA 4...
SDI 448 192 R ...	■	■	1.92	10	4	1.73	0.96	48	2	0.02	0.5°	2.5°			SDA 4...
SDI 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	35	2.5	0.03	0.5°	2.5°			SDA 4...
SDI 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	40	2.5	0.02	0.5°	2.5°			SDA 4...
SDI 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	48	2.5	0.02	0.5°	2.5°			SDA 4...
SDI 440 292 R ...	■	■	2.92	9	4	2.63	1.46	40	3	0.02	0.5°	2.5°			SDA 4...
SDI 448 292 R ...	■	■	2.92	15	4	2.63	1.46	48	3	0.02	0.5°	2.5°			SDA 4...
SDI 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	40	3.5	0.02	0.5°	2.5°			SDA 4...
SDI 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	48	3.5	0.02	0.5°	2.5°			SDA 4...
SDI 440 392 R ...	■	■	3.92	12	4	3.53	1.96	40	4	0.02	0.5°	2.5°			SDA 4...
SDI 448 392 R ...	■	■	3.92	20	4	3.53	1.96	48	4	0.02	0.5°	2.5°			SDA 4...
SDI 644 442 R ...	■	■	4.42	9	6	3.98	2.21	44	4.5	0.02	0.5°	2.5°			SDA 6...
SDI 656 442 R ...	■	■	4.42	18	6	3.98	2.21	56	4.5	0.02	0.5°	2.5°			SDA 6...
SDI 668 442 R ...	■	■	4.42	27	6	3.98	2.21	68	4.5	0.02	0.5°	2.5°			SDA 6...
SDI 644 492 R ...	■	■	4.92	10	6	4.43	2.46	44	5	0.02	0.5°	2.5°			SDA 6...
SDI 656 492 R ...	■	■	4.92	20	6	4.43	2.46	56	5	0.02	0.5°	2.5°			SDA 6...
SDI 668 492 R ...	■	■	4.92	30	6	4.43	2.46	68	5	0.02	0.5°	2.5°			SDA 6...
SDI 644 542 R ...	■	■	5.42	11	6	4.88	2.71	44	5.5	0.02	0.5°	2.5°			SDA 6...
SDI 656 542 R ...	■	■	5.42	22	6	4.88	2.71	56	5.5	0.02	0.5°	2.5°			SDA 6...
SDI 668 542 R ...	■	■	5.42	33	6	4.88	2.71	68	5.5	0.02	0.5°	2.5°			SDA 6...
SDI 644 592 R ...	■	■	5.92	12	6	5.33	2.96	44	6	0.02	0.5°	2.5°			SDA 6...
SDI 656 592 R ...	■	■	5.92	24	6	5.33	2.96	56	6	0.02	0.5°	2.5°			SDA 6...
SDI 668 592 R ...	■	■	5.92	36	6	5.33	2.96	68	6	0.02	0.5°	2.5°			SDA 6...
SDI 850 692 R ...	■	■	6.92	14	8	6.23	3.46	50	7	0.02	0.5°	2.5°			SDA 8...
SDI 866 692 R ...	■	■	6.92	28	8	6.23	3.46	66	7	0.02	0.5°	2.5°			SDA 8...
SDI 882 692 R ...	■	■	6.92	42	8	6.23	3.46	82	7	0.02	0.5°	2.5°			SDA 8...
SDI 850 792 R ...	■	■	7.92	16	8	7.13	3.96	50	8	0.02	0.5°	2.5°			SDA 8...
SDI 866 792 R ...	■	■	7.92	32	8	7.13	3.96	66	8	0.02	0.5°	2.5°			SDA 8...
SDI 882 792 R ...	■	■	7.92	48	8	7.13	3.96	82	8	0.02	0.5°	2.5°			SDA 8...

\* Left execution and other coatings on demand



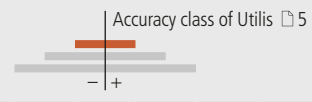
**Turning and facing**  
Strengthen type (for blind holes)



SXI ...

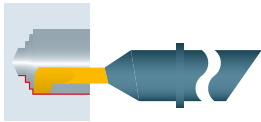
Order designation	Carbide		Dimensions	Holder													
	□ 15	□ 15		□ 320...													
R	○	●	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	l <sub>0</sub>	r <sub>max</sub>	α	β						
		UHM 20	UHM 20 HX														

**PREMIUM-LINE**

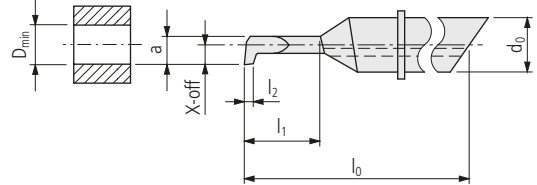
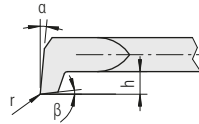


Order designation	Carbide	□ 15	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	l <sub>0</sub>	r <sub>max</sub>	α	β	Accuracy class of Utilis □ 5					Holder
SXI 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 052 R ...	■	■	0.52	2	4	0.47	0.26	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 072 R ...	■	■	0.72	2.5	4	0.65	0.36	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 092 R ...	■	■	0.92	3	4	0.83	0.46	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 122 R ...	■	■	1.22	4	4	1.10	0.61	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 192 R ...	■	■	1.92	6	4	1.73	0.96	35	0.02	0.5°	2.5°						SDA 4...
SXI 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	35	0.02	0.5°	2.5°						SDA 4...
SXI 440 292 R ...	■	■	2.92	9	4	2.63	1.46	40	0.02	0.5°	2.5°						SDA 4...
SXI 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	40	0.02	0.5°	2.5°						SDA 4...
SXI 440 392 R ...	■	■	3.92	12	4	3.53	1.96	40	0.02	0.5°	2.5°						SDA 4...
SXI 440 092 R ...	■	■	0.92	5	4	0.83	0.46	40	0.02	0.5°	2.5°						SDA 4...
SXI 440 142 R ...	■	■	1.42	7.5	4	1.28	0.71	40	0.02	0.5°	2.5°						SDA 4...
SXI 440 192 R ...	■	■	1.92	10	4	1.73	0.96	40	0.02	0.5°	2.5°						SDA 4...
SXI 440 242 R ...	■	■	2.42	12.5	4	2.18	1.21	40	0.02	0.5°	2.5°						SDA 4...
SXI 448 292 R ...	■	■	2.92	15	4	2.63	1.46	48	0.02	0.5°	2.5°						SDA 4...
SXI 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	48	0.02	0.5°	2.5°						SDA 4...
SXI 448 392 R ...	■	■	3.92	20	4	3.53	1.96	48	0.02	0.5°	2.5°						SDA 4...
SXI 644 442 R ...	■	■	4.42	9	6	3.98	2.21	44	0.02	0.5°	2.5°						SDA 6...
SXI 644 492 R ...	■	■	4.92	10	6	4.43	2.46	44	0.02	0.5°	2.5°						SDA 6...
SXI 644 542 R ...	■	■	5.42	11	6	4.88	2.71	44	0.02	0.5°	2.5°						SDA 6...
SXI 644 592 R ...	■	■	5.92	12	6	5.33	2.96	44	0.02	0.5°	2.5°						SDA 6...
SXI 656 442 R ...	■	■	4.42	18	6	3.98	2.21	56	0.02	0.5°	2.5°						SDA 6...
SXI 656 492 R ...	■	■	4.92	20	6	4.43	2.46	56	0.02	0.5°	2.5°						SDA 6...
SXI 656 542 R ...	■	■	5.42	22	6	4.88	2.71	56	0.02	0.5°	2.5°						SDA 6...
SXI 656 592 R ...	■	■	5.92	24	6	5.33	2.96	56	0.02	0.5°	2.5°						SDA 6...
SXI 668 442 R ...	■	■	4.42	27	6	3.98	2.21	68	0.02	0.5°	2.5°						SDA 6...
SXI 668 492 R ...	■	■	4.92	30	6	4.43	2.46	68	0.02	0.5°	2.5°						SDA 6...
SXI 668 542 R ...	■	■	5.42	33	6	4.88	2.71	68	0.02	0.5°	2.5°						SDA 6...
SXI 668 592 R ...	■	■	5.92	36	6	5.33	2.96	68	0.02	0.5°	2.5°						SDA 6...
SXI 850 692 R ...	■	■	6.92	14	8	6.23	3.46	50	0.02	0.5°	2.5°						SDA 8...
SXI 850 792 R ...	■	■	7.92	16	8	7.13	3.96	50	0.02	0.5°	2.5°						SDA 8...
SXI 866 692 R ...	■	■	6.92	28	8	6.23	3.46	66	0.02	0.5°	2.5°						SDA 8...
SXI 866 792 R ...	■	■	7.92	32	8	7.13	3.96	66	0.02	0.5°	2.5°						SDA 8...
SXI 882 692 R ...	■	■	6.92	42	8	6.23	3.46	82	0.02	0.5°	2.5°						SDA 8...
SXI 882 792 R ...	■	■	7.92	48	8	7.13	3.96	82	0.02	0.5°	2.5°						SDA 8...

\* Left execution and other coatings on demand



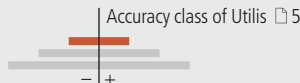
Turning and facing



SDF ...

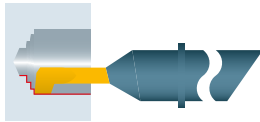
Order designation	Carbide		15	Dimensions											Holder
	UHM 20	UHM 20 HX		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	l <sub>0</sub>	l <sub>2</sub>	r	α	β	

**PREMIUM-LINE**

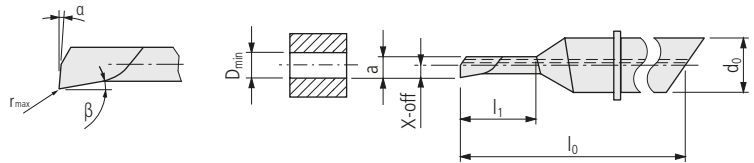


SDF 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	0.11	35	0.5	0.06	0.5°	2.5°	SDA 4...
SDF 435 092 R ...	■	■	0.92	3	4	0.83	0.46	0.23	35	1	0.06	0.5°	2.5°	SDA 4...
SDF 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.23	40	1	0.06	0.5°	2.5°	SDA 4...
SDF 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.23	48	1	0.06	0.5°	2.5°	SDA 4...
SDF 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.36	35	1.5	0.06	0.5°	2.5°	SDA 4...
SDF 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.36	40	1.5	0.06	0.5°	2.5°	SDA 4...
SDF 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.36	48	1.5	0.06	0.5°	2.5°	SDA 4...
SDF 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.48	35	2	0.06	0.5°	2.5°	SDA 4...
SDF 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.48	40	2	0.06	0.5°	2.5°	SDA 4...
SDF 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.48	48	2	0.06	0.5°	2.5°	SDA 4...
SDF 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.61	35	2.5	0.06	0.5°	2.5°	SDA 4...
SDF 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.61	40	2.5	0.06	0.5°	2.5°	SDA 4...
SDF 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.61	48	2.5	0.06	0.5°	2.5°	SDA 4...
SDF 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.73	40	3	0.06	0.5°	2.5°	SDA 4...
SDF 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.73	48	3	0.06	0.5°	2.5°	SDA 4...
SDF 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	0.86	40	3.5	0.06	0.5°	2.5°	SDA 4...
SDF 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	0.86	48	3.5	0.06	0.5°	2.5°	SDA 4...
SDF 440 392 R ...	■	■	3.92	12	4	3.53	1.96	0.98	40	4	0.06	0.5°	2.5°	SDA 4...
SDF 448 392 R ...	■	■	3.92	20	4	3.53	1.96	0.98	48	4	0.06	0.5°	2.5°	SDA 4...
SDF 644 442 R ...	■	■	4.42	9	6	3.98	2.21	1.11	44	4.5	0.08	0.5°	2.5°	SDA 6...
SDF 656 442 R ...	■	■	4.42	18	6	3.98	2.21	1.11	56	4.5	0.08	0.5°	2.5°	SDA 6...
SDF 668 442 R ...	■	■	4.42	27	6	3.98	2.21	1.11	68	4.5	0.08	0.5°	2.5°	SDA 6...
SDF 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.23	44	5	0.08	0.5°	2.5°	SDA 6...
SDF 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.23	56	5	0.08	0.5°	2.5°	SDA 6...
SDF 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.23	68	5	0.08	0.5°	2.5°	SDA 6...
SDF 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.36	44	5.5	0.08	0.5°	2.5°	SDA 6...
SDF 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.36	56	5.5	0.08	0.5°	2.5°	SDA 6...
SDF 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.36	68	5.5	0.08	0.5°	2.5°	SDA 6...
SDF 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.48	44	6	0.08	0.5°	2.5°	SDA 6...
SDF 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.48	56	6	0.08	0.5°	2.5°	SDA 6...
SDF 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.48	68	6	0.08	0.5°	2.5°	SDA 6...
SDF 850 692 R ...	■	■	6.92	14	8	6.23	3.46	1.73	50	7	0.08	0.5°	2.5°	SDA 8...
SDF 866 692 R ...	■	■	6.92	28	8	6.23	3.46	1.73	66	7	0.08	0.5°	2.5°	SDA 8...
SDF 882 692 R ...	■	■	6.92	42	8	6.23	3.46	1.73	82	7	0.08	0.5°	2.5°	SDA 8...
SDF 850 792 R ...	■	■	7.92	16	8	3.96	3.96	1.98	50	8	0.08	0.5°	2.5°	SDA 8...
SDF 866 792 R ...	■	■	7.92	32	8	3.96	3.96	1.98	66	8	0.08	0.5°	2.5°	SDA 8...
SDF 882 792 R ...	■	■	7.92	48	8	3.96	3.96	1.98	82	8	0.08	0.5°	2.5°	SDA 8...

\* Left execution and other coatings on demand



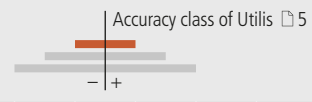
**Turning and facing**  
Strengthen type (for blind holes)



SXF ...

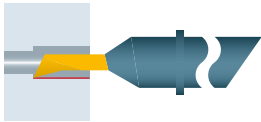
Order designation	Carbide		Dimensions	Holder											
	□ 15	□ 15		□ 320...											
R	○	●	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	l <sub>0</sub>	l <sub>2</sub>	r	α	β		
	UHM 20	UHM 20 HX													

**PREMIUM-LINE**

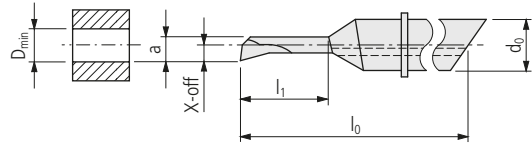
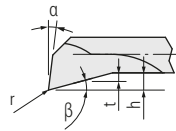


SXF 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	0.05	35	0.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 435 092 R ...	■	■	0.92	3	4	0.83	0.46	0.1	35	1	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 092 R ...	■	■	0.92	5	4	0.83	0.46	0.1	40	1	0.06	0.5°	2.5°		SDA 4R ...
SXF 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.15	35	1.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.15	40	1.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.2	35	2	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 192 R ...	■	■	1.92	10	4	1.73	0.96	0.2	40	2	0.06	0.5°	2.5°		SDA 4R ...
SXF 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.25	35	2.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.25	40	2.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.3	40	3	0.06	0.5°	2.5°		SDA 4R ...
SXF 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.3	48	3	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	0.35	40	3.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	0.35	48	3.5	0.06	0.5°	2.5°		SDA 4R ...
SXF 440 392 R ...	■	■	3.92	12	4	3.53	1.96	0.4	40	4	0.06	0.5°	2.5°		SDA 4R ...
SXF 448 392 R ...	■	■	3.92	20	4	3.53	1.96	0.4	48	4	0.06	0.5°	2.5°		SDA 4R ...
SXF 644 442 R ...	■	■	4.42	9	6	3.98	2.21	0.45	44	4.5	0.08	0.5°	2.5°		SDA 4R ...
SXF 656 442 R ...	■	■	4.42	18	6	3.98	2.21	0.45	56	4.5	0.08	0.5°	2.5°		SDA 4R ...
SXF 668 442 R ...	■	■	4.42	27	6	3.98	2.21	0.45	68	4.5	0.08	0.5°	2.5°		SDA 4R ...
SXF 644 492 R ...	■	■	4.92	10	6	4.43	2.46	0.5	44	5	0.08	0.5°	2.5°		SDA 4R ...
SXF 656 492 R ...	■	■	4.92	20	6	4.43	2.46	0.5	56	5	0.08	0.5°	2.5°		SDA 6R ...
SXF 668 492 R ...	■	■	4.92	30	6	4.43	2.46	0.5	68	5	0.08	0.5°	2.5°		SDA 6R ...
SXF 644 542 R ...	■	■	5.42	11	6	4.88	2.71	0.55	44	5.5	0.08	0.5°	2.5°		SDA 6R ...
SXF 656 542 R ...	■	■	5.42	22	6	4.88	2.71	0.55	56	5.5	0.08	0.5°	2.5°		SDA 6R ...
SXF 668 542 R ...	■	■	5.42	33	6	4.88	2.71	0.55	68	5.5	0.08	0.5°	2.5°		SDA 6R ...
SXF 644 592 R ...	■	■	5.92	12	6	5.33	2.96	0.6	44	6	0.08	0.5°	2.5°		SDA 6R ...
SXF 656 592 R ...	■	■	5.92	24	6	5.33	2.96	0.6	56	6	0.08	0.5°	2.5°		SDA 6R ...
SXF 668 592 R ...	■	■	5.92	36	6	5.33	2.96	0.6	68	6	0.08	0.5°	2.5°		SDA 6R ...
SXF 850 692 R ...	■	■	6.92	14	8	6.23	3.46	0.7	50	7	0.08	0.5°	2.5°		SDA 6R ...
SXF 866 692 R ...	■	■	6.92	8	8	6.23	3.46	0.7	66	7	0.08	0.5°	2.5°		SDA 6R ...
SXF 882 692 R ...	■	■	6.92	42	8	6.23	3.46	0.7	82	7	0.08	0.5°	2.5°		SDA 6R ...
SXF 850 792 R ...	■	■	7.92	16	8	3.96	3.96	0.8	50	8	0.08	0.5°	2.5°		SDA 6R ...
SXF 866 792 R ...	■	■	7.92	32	8	3.96	3.96	0.8	66	8	0.08	0.5°	2.5°		SDA 8R ...
SXF 882 792 R ...	■	■	7.92	48	8	3.96	3.96	0.8	82	8	0.08	0.5°	2.5°		SDA 8R ...

\* Left execution and other coatings on demand



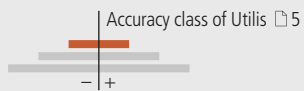
Front turning



SDH ...

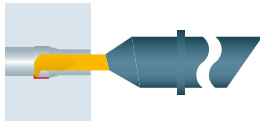
Order designation	Carbide		15	Dimensions											Holder
	UHM 20	UHM 20 HX		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	r	α	β	

**PREMIUM-LINE**

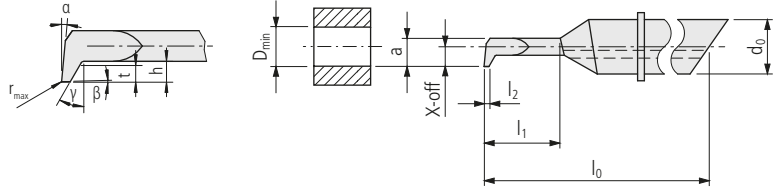


SDH 435 042 R ...	■	■	0.42	1.5	4	0.38	0.21	0.09	0.07	35	0.05	7.5°	22.5°	SDA 4...
SDH 435 092 R ...	■	■	0.92	3	4	0.83	0.46	0.19	0.15	35	0.05	7.5°	22.5°	SDA 4...
SDH 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.21	0.16	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.21	0.16	48	0.05	7.5°	22.5°	SDA 4...
SDH 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.3	0.23	35	0.05	7.5°	22.5°	SDA 4...
SDH 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.31	0.23	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.31	0.23	48	0.05	7.5°	22.5°	SDA 4...
SDH 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.4	0.31	35	0.05	7.5°	22.5°	SDA 4...
SDH 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.41	0.31	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.41	0.31	48	0.05	7.5°	22.5°	SDA 4...
SDH 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.51	0.39	35	0.05	7.5°	22.5°	SDA 4...
SDH 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.52	0.39	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.52	0.39	48	0.05	7.5°	22.5°	SDA 4...
SDH 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.62	0.47	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.62	0.47	48	0.05	7.5°	22.5°	SDA 4...
SDH 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	0.72	0.54	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	0.72	0.54	48	0.05	7.5°	22.5°	SDA 4...
SDH 440 392 R ...	■	■	3.92	12	4	3.53	1.96	0.83	0.62	40	0.05	7.5°	22.5°	SDA 4...
SDH 448 392 R ...	■	■	3.92	20	4	3.53	1.96	0.83	0.62	48	0.05	7.5°	22.5°	SDA 4...
SDH 644 442 R ...	■	■	4.42	9	6	3.98	2.21	0.93	0.7	44	0.05	7.5°	22.5°	SDA 6...
SDH 656 442 R ...	■	■	4.42	18	6	3.98	2.21	0.93	0.7	56	0.05	7.5°	22.5°	SDA 6...
SDH 668 442 R ...	■	■	4.42	27	6	3.98	2.21	0.93	0.7	68	0.05	7.5°	22.5°	SDA 6...
SDH 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.04	0.78	44	0.05	7.5°	22.5°	SDA 6...
SDH 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.04	0.78	56	0.05	7.5°	22.5°	SDA 6...
SDH 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.04	0.78	68	0.05	7.5°	22.5°	SDA 6...
SDH 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.14	0.85	44	0.05	7.5°	22.5°	SDA 6...
SDH 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.14	0.85	56	0.05	7.5°	22.5°	SDA 6...
SDH 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.14	0.85	68	0.05	7.5°	22.5°	SDA 6...
SDH 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.24	0.93	44	0.05	7.5°	22.5°	SDA 6...
SDH 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.24	0.93	56	0.05	7.5°	22.5°	SDA 6...
SDH 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.24	0.93	68	0.05	7.5°	22.5°	SDA 6...
SDH 850 692 R ...	■	■	6.92	14	8	6.23	3.46	1.45	1.09	50	0.05	7.5°	22.5°	SDA 8...
SDH 866 692 R ...	■	■	6.92	28	8	6.23	3.46	1.45	1.09	66	0.05	7.5°	22.5°	SDA 8...
SDH 882 692 R ...	■	■	6.92	42	8	6.23	3.46	1.45	1.09	82	0.05	7.5°	22.5°	SDA 8...
SDH 850 792 R ...	■	■	7.92	16	8	7.13	3.96	1.66	1.24	50	0.05	7.5°	22.5°	SDA 8...
SDH 866 792 R ...	■	■	7.92	32	8	7.13	3.96	1.66	1.24	66	0.05	7.5°	22.5°	SDA 8...
SDH 882 792 R ...	■	■	7.92	48	8	7.13	3.96	1.66	1.24	82	0.05	7.5°	22.5°	SDA 8...

\* Left execution and other coatings on demand



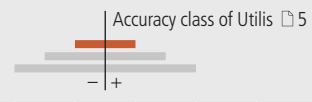
Turning and front turning



SDK ...

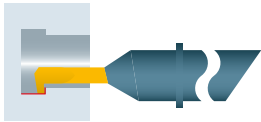
Order designation	Carbide		Dimensions	Holder												
	□ 15	□ 15		□ 320...												
R	○	●	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	r <sub>max</sub>	α	β	γ	
		UHM 20	UHM 20 HX													

**PREMIUM-LINE**

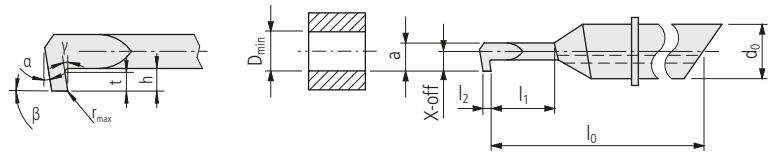


SDK 435 092 R ...	■	■	0.92	1.5	4	0.83	0.46	0.23	0.15	35	0.5	0.02	0.5°	0.5°	30°	SDA 4...
SDK 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.23	0.1	40	0.5	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.23	0.1	48	0.5	0.02	0.5°	0.5°	30°	SDA 4...
SDK 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.36	0.23	35	0.75	0.02	0.5°	0.5°	30°	SDA 4...
SDK 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.36	0.2	40	0.75	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.36	0.2	48	0.75	0.02	0.5°	0.5°	30°	SDA 4...
SDK 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.48	0.32	35	1	0.03	0.5°	0.5°	30°	SDA 4...
SDK 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.48	0.3	40	1	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.48	0.3	48	1	0.02	0.5°	0.5°	30°	SDA 4...
SDK 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.61	0.4	35	1.25	0.03	0.5°	0.5°	30°	SDA 4...
SDK 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.61	0.4	40	1.25	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.61	0.4	48	1.25	0.02	0.5°	0.5°	30°	SDA 4...
SDK 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.73	0.5	40	1.5	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.73	0.5	48	1.5	0.02	0.5°	0.5°	30°	SDA 4...
SDK 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	0.86	0.6	40	1.75	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	0.86	0.6	48	1.75	0.02	0.5°	0.5°	30°	SDA 4...
SDK 440 392 R ...	■	■	3.92	12	4	3.53	1.96	0.98	0.7	40	2	0.02	0.5°	0.5°	30°	SDA 4...
SDK 448 392 R ...	■	■	3.92	20	4	3.53	1.96	0.98	0.7	48	2	0.02	0.5°	0.5°	30°	SDA 4...
SDK 644 442 R ...	■	■	4.42	9	6	3.98	2.21	1.11	0.7	44	2.25	0.02	0.5°	0.5°	30°	SDA 6...
SDK 656 442 R ...	■	■	4.42	18	6	3.98	2.21	1.11	0.7	56	2.25	0.02	0.5°	0.5°	30°	SDA 6...
SDK 668 442 R ...	■	■	4.42	27	6	3.98	2.21	1.11	0.7	68	2.25	0.02	0.5°	0.5°	30°	SDA 6...
SDK 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.23	0.8	44	2.5	0.02	0.5°	0.5°	30°	SDA 6...
SDK 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.23	0.8	56	2.5	0.02	0.5°	0.5°	30°	SDA 6...
SDK 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.23	0.8	68	2.5	0.02	0.5°	0.5°	30°	SDA 6...
SDK 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.36	0.9	44	2.75	0.02	0.5°	0.5°	30°	SDA 6...
SDK 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.36	0.9	56	2.75	0.02	0.5°	0.5°	30°	SDA 6...
SDK 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.36	0.9	68	2.75	0.02	0.5°	0.5°	30°	SDA 6...
SDK 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.48	1	44	3	0.02	0.5°	0.5°	30°	SDA 6...
SDK 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.48	1	56	3	0.02	0.5°	0.5°	30°	SDA 6...
SDK 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.48	1	68	3	0.02	0.5°	0.5°	30°	SDA 6...
SDK 850 692 R ...	■	■	6.92	14	8	6.23	3.46	1.73	1.2	50	3.5	0.02	0.5°	0.5°	30°	SDA 8...
SDK 866 692 R ...	■	■	6.92	28	8	6.23	3.46	1.73	1.2	66	3.5	0.02	0.5°	0.5°	30°	SDA 8...
SDK 882 692 R ...	■	■	6.92	42	8	6.23	3.46	1.73	1.2	82	3.5	0.02	0.5°	0.5°	30°	SDA 8...
SDK 850 792 R ...	■	■	7.92	16	8	7.13	3.96	1.98	1.3	50	4	0.02	0.5°	0.5°	30°	SDA 8...
SDK 866 792 R ...	■	■	7.92	32	8	7.13	3.96	1.98	1.3	66	4	0.02	0.5°	0.5°	30°	SDA 8...
SDK 882 792 R ...	■	■	7.92	48	8	7.13	3.96	1.98	1.3	82	4	0.02	0.5°	0.5°	30°	SDA 8...

\* Left execution and other coatings on demand



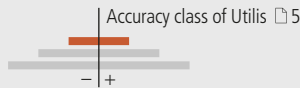
Back turning



SDM ...

Order designation	Carbide		Dimensions	Holder												
	□ 15	□ 15		□ 320...												
R *	○	●	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	r <sub>max</sub>	α	β	γ	
		○	●	UHM 20	UHM 20 HX											

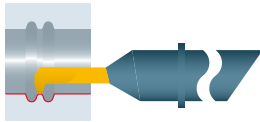
**PREMIUM-LINE**



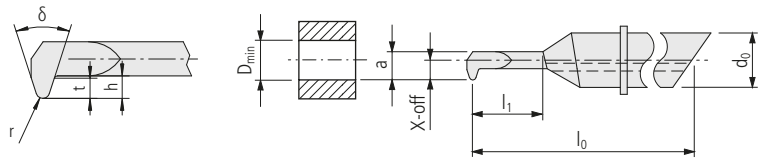
SDM 435 092 R ...	■	■	0.92	1.5	4	0.83	0.46	0.23	0.15	35	0.5	0.02	30°	0.5°	0.5°	SDA 4...
SDM 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.23	0.1	40	0.5	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.23	0.1	48	0.5	0.02	30°	0.5°	0.5°	SDA 4...
SDM 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.36	0.23	35	0.75	0.02	30°	0.5°	0.5°	SDA 4...
SDM 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.36	0.2	40	0.75	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.36	0.2	48	0.75	0.02	30°	0.5°	0.5°	SDA 4...
SDM 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.48	0.32	35	1	0.03	30°	0.5°	0.5°	SDA 4...
SDM 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.48	0.3	40	1	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.48	0.3	48	1	0.02	30°	0.5°	0.5°	SDA 4...
SDM 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.61	0.4	35	1.25	0.03	30°	0.5°	0.5°	SDA 4...
SDM 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.61	0.4	40	1.25	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.61	0.4	48	1.25	0.02	30°	0.5°	0.5°	SDA 4...
SDM 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.73	0.5	40	1.5	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.73	0.5	48	1.5	0.02	30°	0.5°	0.5°	SDA 4...
SDM 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	0.86	0.6	40	1.75	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	0.86	0.6	48	1.75	0.02	30°	0.5°	0.5°	SDA 4...
SDM 440 392 R ...	■	■	3.92	12	4	3.53	1.96	0.98	0.7	40	2	0.02	30°	0.5°	0.5°	SDA 4...
SDM 448 392 R ...	■	■	3.92	20	4	3.53	1.96	0.98	0.7	48	2	0.02	30°	0.5°	0.5°	SDA 4...
SDM 644 442 R ...	■	■	4.42	9	6	3.98	2.21	1.11	0.7	44	2.25	0.02	30°	0.5°	0.5°	SDA 6...
SDM 656 442 R ...	■	■	4.42	18	6	3.98	2.21	1.11	0.7	56	2.25	0.02	30°	0.5°	0.5°	SDA 6...
SDM 668 442 R ...	■	■	4.42	27	6	3.98	2.21	1.11	0.7	68	2.25	0.02	30°	0.5°	0.5°	SDA 6...
SDM 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.23	0.8	44	2.5	0.02	30°	0.5°	0.5°	SDA 6...
SDM 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.23	0.8	56	2.5	0.02	30°	0.5°	0.5°	SDA 6...
SDM 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.23	0.8	68	2.5	0.02	30°	0.5°	0.5°	SDA 6...
SDM 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.36	0.9	44	2.75	0.02	30°	0.5°	0.5°	SDA 6...
SDM 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.36	0.9	56	2.75	0.02	30°	0.5°	0.5°	SDA 6...
SDM 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.36	0.9	68	2.75	0.02	30°	0.5°	0.5°	SDA 6...
SDM 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.48	1	44	3	0.02	30°	0.5°	0.5°	SDA 6...
SDM 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.48	1	56	3	0.02	30°	0.5°	0.5°	SDA 6...
SDM 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.48	1	68	3	0.02	30°	0.5°	0.5°	SDA 6...
SDM 850 692 R ...	■	■	6.92	14	8	6.23	3.46	1.73	1.2	50	3.5	0.02	30°	0.5°	0.5°	SDA 8...
SDM 866 692 R ...	■	■	6.92	28	8	6.23	3.46	1.73	1.2	66	3.5	0.02	30°	0.5°	0.5°	SDA 8...
SDM 882 692 R ...	■	■	6.92	42	8	6.23	3.46	1.73	1.2	82	3.5	0.02	30°	0.5°	0.5°	SDA 8...
SDM 850 792 R ...	■	■	7.92	16	8	7.13	3.96	1.98	1.3	50	4	0.02	30°	0.5°	0.5°	SDA 8...
SDM 866 792 R ...	■	■	7.92	32	8	7.13	3.96	1.98	1.3	66	4	0.02	30°	0.5°	0.5°	SDA 8...
SDM 882 792 R ...	■	■	7.92	48	8	7.13	3.96	1.98	1.3	82	4	0.02	30°	0.5°	0.5°	SDA 8...

\* Left execution and other coatings on demand





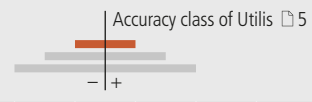
Turning



SDO ...

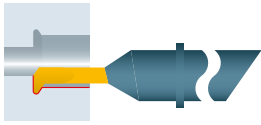
Order designation	Carbide		Dimensions	Holder											
	□ 15	□ 15		□ 320...											
R	○	●	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	r	δ			
		UHM 20	UHM 20 HX												

**PREMIUM-LINE**

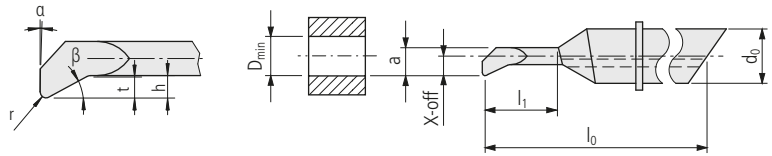


SDO 435 092 R ...	■	■	0.92	3	4	0.83	0.46	0.31	0.23	35	0.05	59°			SDA 4...
SDO 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.31	0.2	40	0.05	59°			SDA 4...
SDO 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.31	0.2	48	0.05	59°			SDA 4...
SDO 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.47	0.36	35	0.05	59°			SDA 4...
SDO 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.47	0.4	40	0.075	59°			SDA 4...
SDO 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.47	0.4	48	0.075	59°			SDA 4...
SDO 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.64	0.48	35	0.05	59°			SDA 4...
SDO 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.64	0.5	40	0.1	59°			SDA 4...
SDO 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.64	0.5	48	0.1	59°			SDA 4...
SDO 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.81	0.61	35	0.05	59°			SDA 4...
SDO 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.81	0.6	40	0.125	59°			SDA 4...
SDO 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.81	0.6	48	0.125	59°			SDA 4...
SDO 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.97	0.7	40	0.15	59°			SDA 4...
SDO 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.97	0.7	48	0.15	59°			SDA 4...
SDO 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	1.14	0.9	40	0.175	59°			SDA 4...
SDO 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	1.14	0.9	48	0.175	59°			SDA 4...
SDO 440 392 R ...	■	■	3.92	12	4	3.53	1.96	1.31	1	40	0.2	59°			SDA 4...
SDO 448 392 R ...	■	■	3.92	20	4	3.53	1.96	1.31	1	48	0.2	59°			SDA 4...
SDO 644 442 R ...	■	■	4.42	9	6	3.98	2.21	1.47	1.1	44	0.225	59°			SDA 6...
SDO 656 442 R ...	■	■	4.42	18	6	3.98	2.21	1.47	1.1	56	0.225	59°			SDA 6...
SDO 668 442 R ...	■	■	4.42	27	6	3.98	2.21	1.47	1.1	68	0.225	59°			SDA 6...
SDO 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.64	1.2	44	0.25	59°			SDA 6...
SDO 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.64	1.2	56	0.25	59°			SDA 6...
SDO 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.64	1.2	68	0.25	59°			SDA 6...
SDO 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.8	1.4	44	0.275	59°			SDA 6...
SDO 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.8	1.4	56	0.275	59°			SDA 6...
SDO 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.8	1.4	68	0.275	59°			SDA 6...
SDO 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.97	1.5	44	0.3	59°			SDA 6...
SDO 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.97	1.5	56	0.3	59°			SDA 6...
SDO 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.97	1.5	68	0.3	59°			SDA 6...
SDO 850 692 R ...	■	■	6.92	14	8	6.23	3.46	2.3	1.7	50	0.35	59°			SDA 8...
SDO 866 692 R ...	■	■	6.92	28	8	6.23	3.46	2.3	1.7	66	0.35	59°			SDA 8...
SDO 882 692 R ...	■	■	6.92	42	8	6.23	3.46	2.3	1.7	82	0.35	59°			SDA 8...
SDO 850 792 R ...	■	■	7.92	16	8	7.13	3.96	2.64	2	50	0.4	59°			SDA 8...
SDO 866 792 R ...	■	■	7.92	32	8	7.13	3.96	2.64	2	66	0.4	59°			SDA 8...
SDO 882 792 R ...	■	■	7.92	48	8	7.13	3.96	2.64	2	82	0.4	59°			SDA 8...

\* Left execution and other coatings on demand



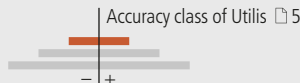
Turning



SDQ ...

Order designation	Carbide		15	Dimensions											Holder
	UHM 20	UHM 20 HX		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	r	α	β	

**PREMIUM-LINE**

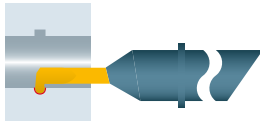


SDQ 435 092 R ...	■	■	0.92	1.5	4	0.83	0.46	0.31	0.23	35	0.05	0.5°	30.5°	SDA 4...
SDQ 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.31	0.2	40	0.05	0.5°	30.5°	SDA 4...
SDQ 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.31	0.2	48	0.05	0.5°	30.5°	SDA 4...
SDQ 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.47	0.36	35	0.075	0.5°	30.5°	SDA 4...
SDQ 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.47	0.4	40	0.075	0.5°	30.5°	SDA 4...
SDQ 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.47	0.4	48	0.075	0.5°	30.5°	SDA 4...
SDQ 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.64	0.48	35	0.1	0.5°	30.5°	SDA 4...
SDQ 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.64	0.5	40	0.1	0.5°	30.5°	SDA 4...
SDQ 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.64	0.5	48	0.1	0.5°	30.5°	SDA 4...
SDQ 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.81	0.61	35	0.125	0.5°	30.5°	SDA 4...
SDQ 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.81	0.6	40	0.125	0.5°	30.5°	SDA 4...
SDQ 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.81	0.6	48	0.125	0.5°	30.5°	SDA 4...
SDQ 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.97	0.7	40	0.15	0.5°	30.5°	SDA 4...
SDQ 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.97	0.7	48	0.15	0.5°	30.5°	SDA 4...
SDQ 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	1.14	0.9	40	0.175	0.5°	30.5°	SDA 4...
SDQ 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	1.14	0.9	48	0.175	0.5°	30.5°	SDA 4...
SDQ 440 392 R ...	■	■	3.92	12	4	3.53	1.96	1.31	1	40	0.2	0.5°	30.5°	SDA 4...
SDQ 448 392 R ...	■	■	3.92	20	4	3.53	1.96	1.31	1	48	0.2	0.5°	30.5°	SDA 4...
SDQ 644 442 R ...	■	■	4.42	9	6	3.98	2.21	1.47	1.1	44	0.225	0.5°	30.5°	SDA 6...
SDQ 656 442 R ...	■	■	4.42	18	6	3.98	2.21	1.47	1.1	56	0.225	0.5°	30.5°	SDA 6...
SDQ 668 442 R ...	■	■	4.42	27	6	3.98	2.21	1.47	1.1	68	0.225	0.5°	30.5°	SDA 6...
SDQ 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.64	1.2	44	0.25	0.5°	30.5°	SDA 6...
SDQ 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.64	1.2	56	0.25	0.5°	30.5°	SDA 6...
SDQ 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.64	1.2	68	0.25	0.5°	30.5°	SDA 6...
SDQ 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.8	1.4	44	0.275	0.5°	30.5°	SDA 6...
SDQ 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.8	1.4	56	0.275	0.5°	30.5°	SDA 6...
SDQ 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.8	1.4	68	0.275	0.5°	30.5°	SDA 6...
SDQ 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.97	1.5	44	0.3	0.5°	30.5°	SDA 6...
SDQ 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.97	1.5	56	0.3	0.5°	30.5°	SDA 6...
SDQ 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.97	1.5	68	0.3	0.5°	30.5°	SDA 6...
SDQ 850 692 R ...	■	■	6.92	14	8	6.23	3.46	2.3	1.7	50	0.35	0.5°	30.5°	SDA 8...
SDQ 866 692 R ...	■	■	6.92	28	8	6.23	3.46	2.3	1.7	66	0.35	0.5°	30.5°	SDA 8...
SDQ 882 692 R ...	■	■	6.92	42	8	6.23	3.46	2.3	1.7	82	0.35	0.5°	30.5°	SDA 8...
SDQ 850 792 R ...	■	■	7.92	16	8	7.13	3.96	2.64	2	50	0.4	0.5°	30.5°	SDA 8...
SDQ 866 792 R ...	■	■	7.92	32	8	7.13	3.96	2.64	2	66	0.4	0.5°	30.5°	SDA 8...
SDQ 882 792 R ...	■	■	7.92	48	8	7.13	3.96	2.64	2	82	0.4	0.5°	30.5°	SDA 8...

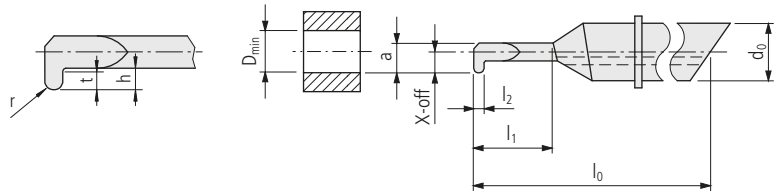
\* Left execution and other coatings on demand

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UTILIS  
**multidec**<sup>®</sup>  
swiss type tools



Radius-grooving



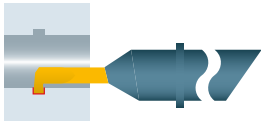
SDR ...

Order designation	Carbide		Dimensions	Accuracy class of Utilis □ 5										Holder			
	□ 15	□ 15		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	r				
<b>R</b>	○	●	UHM 20	UHM 20 HX													

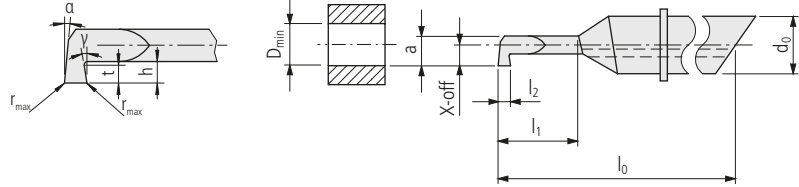
**PREMIUM-LINE**

SDR 435 092 R ...	■	■	0.92	3	4	0.83	0.46	0.3	0.2	35	0.2	0.1					SDA 4...
SDR 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.38	0.25	35	0.25	0.125					SDA 4...
SDR 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.45	0.3	35	0.3	0.15					SDA 4...
SDR 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.53	0.35	35	0.35	0.175					SDA 4...
SDR 440 092 R ...	■	■	0.92	5	4	0.83	0.46	0.3	0.2	40	0.2	0.1					SDA 4...
SDR 440 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.38	0.25	40	0.25	0.125					SDA 4...
SDR 440 192 R ...	■	■	1.92	10	4	1.73	0.96	0.45	0.3	40	0.3	0.15					SDA 4...
SDR 440 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.53	0.35	40	0.35	0.175					SDA 4...
SDR 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.6	0.4	40	0.4	0.2					SDA 4...
SDR 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	0.68	0.45	40	0.45	0.225					SDA 4...
SDR 440 392 R ...	■	■	3.92	12	4	3.53	1.96	0.75	0.5	40	0.5	0.25					SDA 4...
SDR 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.6	0.4	48	0.4	0.2					SDA 4...
SDR 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	0.68	0.45	48	0.45	0.225					SDA 4...
SDR 448 392 R ...	■	■	3.92	20	4	3.53	1.96	0.75	0.5	48	0.5	0.25					SDA 4...
SDR 644 442 R ...	■	■	4.42	9	6	3.98	2.21	0.83	0.55	44	0.55	0.275					SDA 6...
SDR 644 492 R ...	■	■	4.92	10	6	4.43	2.46	0.9	0.6	44	0.6	0.3					SDA 6...
SDR 644 542 R ...	■	■	5.42	11	6	4.88	2.71	0.98	0.65	44	0.65	0.325					SDA 6...
SDR 644 592 R ...	■	■	5.92	12	6	5.53	2.96	1.05	0.7	44	0.7	0.35					SDA 6...
SDR 656 442 R ...	■	■	4.42	18	6	3.98	2.21	0.83	0.55	56	0.55	0.275					SDA 6...
SDR 656 492 R ...	■	■	4.92	20	6	4.43	2.46	0.9	0.6	56	0.6	0.3					SDA 6...
SDR 656 542 R ...	■	■	5.42	22	6	4.88	2.71	0.98	0.65	56	0.65	0.325					SDA 6...
SDR 656 592 R ...	■	■	5.92	24	6	5.53	2.96	1.05	0.7	56	0.7	0.35					SDA 6...
SDR 668 442 R ...	■	■	4.42	27	6	3.98	2.21	0.83	0.55	68	0.55	0.275					SDA 6...
SDR 668 492 R ...	■	■	4.92	30	6	4.43	2.46	0.9	0.6	68	0.6	0.3					SDA 6...
SDR 668 542 R ...	■	■	5.42	33	6	4.88	2.71	0.98	0.65	68	0.65	0.325					SDA 6...
SDR 668 592 R ...	■	■	5.92	36	6	5.53	2.96	1.05	0.7	68	0.7	0.35					SDA 6...

\* Left execution and other coatings on demand



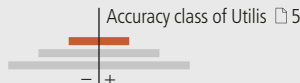
Grooving



SDS ...

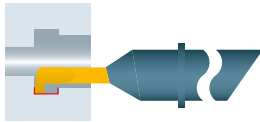
Order designation	Carbide		15	Dimensions											Holder □ 320...
	UHM 20	UHM 20 HX		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	r <sub>max</sub>	α	

**PREMIUM-LINE**

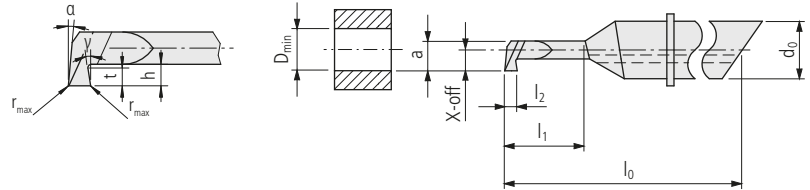


SDS 435 092 R ...	■	■	0.92	1.5	4	0.83	0.46	0.31	0.23	35	0.2	0.02	2°	2°	SDA 4...
SDS 440 092 R ...	■	■	0.92	3	4	0.83	0.46	0.31	0.2	40	0.2	0.02	2°	2°	SDA 4...
SDS 448 092 R ...	■	■	0.92	5	4	0.83	0.46	0.31	0.2	48	0.2	0.02	2°	2°	SDA 4...
SDS 435 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.47	0.36	35	0.25	0.02	2°	2°	SDA 4...
SDS 440 142 R ...	■	■	1.42	4.5	4	1.28	0.71	0.47	0.4	40	0.25	0.02	2°	2°	SDA 4...
SDS 448 142 R ...	■	■	1.42	7.5	4	1.28	0.71	0.47	0.4	48	0.25	0.02	2°	2°	SDA 4...
SDS 435 192 R ...	■	■	1.92	6	4	1.73	0.96	0.64	0.48	35	0.3	0.02	2°	2°	SDA 4...
SDS 440 192 R ...	■	■	1.92	6	4	1.73	0.96	0.64	0.5	40	0.3	0.02	2°	2°	SDA 4...
SDS 448 192 R ...	■	■	1.92	10	4	1.73	0.96	0.64	0.5	48	0.3	0.02	2°	2°	SDA 4...
SDS 435 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.81	0.61	35	0.35	0.02	2°	2°	SDA 4...
SDS 440 242 R ...	■	■	2.42	7.5	4	2.18	1.21	0.81	0.6	40	0.35	0.02	2°	2°	SDA 4...
SDS 448 242 R ...	■	■	2.42	12.5	4	2.18	1.21	0.81	0.6	48	0.35	0.02	2°	2°	SDA 4...
SDS 440 292 R ...	■	■	2.92	9	4	2.63	1.46	0.97	0.7	40	0.4	0.02	2°	2°	SDA 4...
SDS 448 292 R ...	■	■	2.92	15	4	2.63	1.46	0.97	0.7	48	0.4	0.02	2°	2°	SDA 4...
SDS 440 342 R ...	■	■	3.42	10.5	4	3.08	1.71	1.14	0.9	40	0.45	0.02	2°	2°	SDA 4...
SDS 448 342 R ...	■	■	3.42	17.5	4	3.08	1.71	1.14	0.9	48	0.45	0.02	2°	2°	SDA 4...
SDS 440 392 R ...	■	■	3.92	12	4	3.53	1.96	1.31	1	40	0.5	0.02	2°	2°	SDA 4...
SDS 448 392 R ...	■	■	3.92	20	4	3.53	1.96	1.31	1	48	0.5	0.02	2°	2°	SDA 4...
SDS 644 442 R ...	■	■	4.42	9	6	3.98	2.21	1.47	1.1	44	1	0.02	2°	2°	SDA 6...
SDS 656 442	■	■	4.42	18	6	3.98	2.21	1.47	1.1	56	1	0.02	2°	2°	SDA 6...
SDS 668 442 R ...	■	■	4.42	27	6	3.98	2.21	1.47	1.1	68	1	0.02	2°	2°	SDA 6...
SDS 644 492 R ...	■	■	4.92	10	6	4.43	2.46	1.64	1.2	44	1.5	0.02	2°	2°	SDA 6...
SDS 656 492 R ...	■	■	4.92	20	6	4.43	2.46	1.64	1.2	56	1.5	0.02	2°	2°	SDA 6...
SDS 668 492 R ...	■	■	4.92	30	6	4.43	2.46	1.64	1.2	68	1.5	0.02	2°	2°	SDA 6...
SDS 644 542 R ...	■	■	5.42	11	6	4.88	2.71	1.8	1.4	44	1	0.02	2°	2°	SDA 6...
SDS 656 542 R ...	■	■	5.42	22	6	4.88	2.71	1.8	1.4	56	1	0.02	2°	2°	SDA 6...
SDS 668 542 R ...	■	■	5.42	33	6	4.88	2.71	1.8	1.4	68	1	0.02	2°	2°	SDA 6...
SDS 644 592 R ...	■	■	5.92	12	6	5.33	2.96	1.97	1.5	44	1.5	0.02	2°	2°	SDA 6...
SDS 656 592 R ...	■	■	5.92	24	6	5.33	2.96	1.97	1.5	56	1.5	0.02	2°	2°	SDA 6...
SDS 668 592 R ...	■	■	5.92	36	6	5.33	2.96	1.97	1.5	68	1.5	0.02	2°	2°	SDA 6...
SDS 850 692 R ...	■	■	6.92	14	8	6.23	3.46	2.3	1.7	50	1.5	0.02	2°	2°	SDA 8...
SDS 866 692 R ...	■	■	6.92	28	8	6.23	3.46	2.3	1.7	66	1.5	0.02	2°	2°	SDA 8...
SDS 882 692 R ...	■	■	6.92	42	8	6.23	3.46	2.3	1.7	82	1.5	0.02	2°	2°	SDA 8...
SDS 850 792 R ...	■	■	7.92	16	8	7.13	3.96	2.64	2	50	2	0.02	2°	2°	SDA 8...
SDS 866 792 R ...	■	■	7.92	32	8	7.13	3.96	2.64	2	66	2	0.02	2°	2°	SDA 8...
SDS 882 792 R ...	■	■	7.92	48	8	7.13	3.96	2.64	2	82	2	0.02	2°	2°	SDA 8...

\* Left execution and other coatings on demand



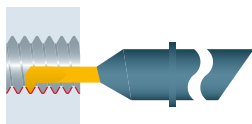
Grooving and turning



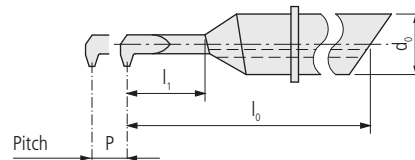
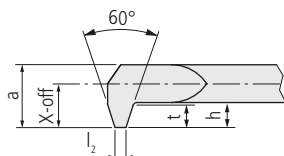
SDT ...

Order designation	Carbide □ 15		Dimensions												Holder
	□ 15	□ 15	D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	r <sub>max</sub>	α	γ	□ 320...
<b>R</b> *	○	●	UHM 20	UHM 20 HX											
Accuracy class of Utilis □ 5															
<b>PREMIUM-LINE</b>	■	■	3.92	12	4	3.53	1.96	1.31	1	40	1	0.02	0°	1.5°	SDA 4...
SDT 440 392 R ...	■	■	3.92	20	4	3.53	1.96	1.31	1	48	1	0.02	0°	1.5°	SDA 4...
SDT 448 392 R ...	■	■	5.92	12	6	5.33	2.96	1.97	1.5	44	1.25	0.02	0°	1.5°	SDA 6...
SDT 644 592 R ...	■	■	5.92	24	6	5.33	2.96	1.97	1.5	56	1.25	0.02	0°	1.5°	SDA 6...
SDT 656 592 R ...	■	■	5.92	36	6	5.33	2.96	1.97	1.5	68	1.25	0.02	0°	1.5°	SDA 6...
SDT 668 592 R ...	■	■	7.92	16	8	7.13	3.96	2.64	2	50	1.5	0.02	0°	1.5°	SDA 8...
SDT 850 792 R ...	■	■	7.92	32	8	7.13	3.96	2.64	2	66	1.5	0.02	0°	1.5°	SDA 8...
SDT 866 792 R ...	■	■	7.92	48	8	7.13	3.96	2.64	2	82	1.5	0.02	0°	1.5°	SDA 8...
SDT 882 792 R ...															

\* Left execution and other coatings on demand



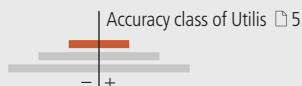
Threading (partial profile 60°)



SDU ...

Order designation	Carbide		Standard	Dimensions									Holder
	□ 15	□ 15		P	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	
R *	○	●	ISO DIN13	P	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	Holder □ 320...
	○	●											
	UHM 20	UHM 20 HX											

**PREMIUM-LINE**



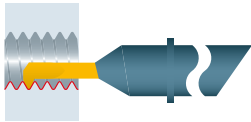
Order designation	Carbide	Standard	P	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	l <sub>2</sub>	Holder
SDU 435 160 R ...	■	M1.6–M2	0.35–0.4	3	4	1.1	0.8	0.5	0.35	35	0.02	SDA 4...
SDU 435 200 R ...	■	M2–M3	0.4–0.5	4.5	4	1.3	1	0.6	0.45	35	0.03	SDA 4...
SDU 435 300 R ...	■	M3–M4	0.5–0.7	6	4	2	1.5	0.9	0.6	35	0.04	SDA 4...
SDU 435 400 R ...	■	M4–M5	0.7–0.8	7.5	4	2.7	2	1.2	0.8	35	0.05	SDA 4...
SDU 440 160 R ...	■	M1.6–M2	0.35–0.4	4.8	4	1.1	0.8	0.5	0.35	40	0.02	SDA 4...
SDU 440 200 R ...	■	M2–M3	0.4–0.5	6	4	1.3	1	0.6	0.45	40	0.03	SDA 4...
SDU 440 300 R ...	■	M3–M4	0.5–0.7	9	4	2	1.5	0.9	0.6	40	0.04	SDA 4...
SDU 440 400 R ...	■	M4–M5	0.7–0.8	12	4	2.7	2	1.2	0.8	40	0.05	SDA 4...
SDU 656 500 R ...	■	M5–M6	0.8–1	15	6	3.8	2.05	1.2	0.9	56	0.06	SDA 6...
SDU 656 600 R ...	■	M6–M7	1	18	6	4.6	2.45	1.2	0.9	56	0.07	SDA 6...
SDU 656 700 R ...	■	M7–M8	1–1.25	21	6	5.6	2.95	1.4	1.1	56	0.08	SDA 6...

\* Left execution and other coatings on demand

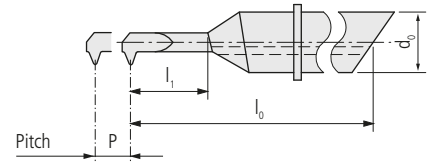
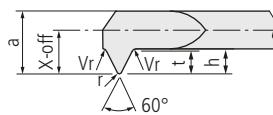
Application recommendation for number of passes at threading □ 154

314

UTILIS  
**multidec**  
swiss type tools



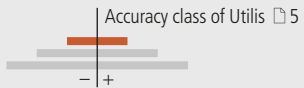
Threading (full profile metric)



SDV ...

Order designation	Carbide □ 15		Standard	Dimensions										Holder □ 320...
	UHM 20	UHM 20 HX		P	l <sub>1</sub>	d <sub>0</sub>	a	X-off	h	t	l <sub>0</sub>	r	Vr	

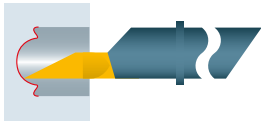
**PREMIUM-LINE**



SDV 435 100 R ...	■	■	M1	0.25	3	4	0.6	0.5	0.2	0.162	35	0.02	0.04	SDA 4...
SDV 435 120 R ...	■	■	M1.2	0.25	3.6	4	0.76	0.6	0.2	0.162	35	0.02	0.04	SDA 4...
SDV 435 140 R ...	■	■	M1.4	0.3	4.2	4	0.92	0.7	0.23	0.194	35	0.02	0.05	SDA 4...
SDV 435 160 R ...	■	■	M1.6	0.35	4.8	4	1.08	0.8	0.26	0.227	35	0.03	0.05	SDA 4...
SDV 435 180 R ...	■	■	M1.8	0.35	5.4	4	1.24	0.9	0.26	0.227	35	0.03	0.05	SDA 4...
SDV 435 200 R ...	■	■	M2	0.4	6	4	1.4	1	0.3	0.258	35	0.03	0.05	SDA 4...
SDV 435 220 R ...	■	■	M2.2	0.45	6.6	4	1.56	1.1	0.33	0.287	35	0.03	0.05	SDA 4...
SDV 435 250 R ...	■	■	M2.5	0.45	7.5	4	1.8	1.25	0.33	0.287	35	0.03	0.05	SDA 4...
SDV 440 100 R ...	■	■	M1	0.25	5	4	0.6	0.5	0.2	0.162	40	0.02	0.04	SDA 4...
SDV 440 120 R ...	■	■	M1.2	0.25	6	4	0.76	0.6	0.2	0.162	40	0.02	0.04	SDA 4...
SDV 440 140 R ...	■	■	M1.4	0.3	7	4	0.92	0.7	0.23	0.194	40	0.02	0.05	SDA 4...
SDV 440 160 R ...	■	■	M1.6	0.35	8	4	1.08	0.8	0.26	0.227	40	0.03	0.05	SDA 4...
SDV 440 180 R ...	■	■	M1.8	0.35	9	4	1.24	0.9	0.26	0.227	40	0.03	0.05	SDA 4...
SDV 440 200 R ...	■	■	M2	0.4	10	4	1.4	1	0.3	0.258	40	0.03	0.05	SDA 4...
SDV 440 220 R ...	■	■	M2.2	0.45	11	4	1.56	1.1	0.33	0.287	40	0.03	0.05	SDA 4...
SDV 440 250 R ...	■	■	M2.5	0.45	12.5	4	1.8	1.25	0.33	0.287	40	0.03	0.05	SDA 4...
SDV 440 300 R ...	■	■	M3	0.5	9	4	2.2	1.5	0.37	0.316	40	0.04	0.06	SDA 4...
SDV 440 350 R ...	■	■	M3.5	0.6	10.5	4	2.6	1.75	0.43	0.374	40	0.04	0.06	SDA 4...
SDV 440 400 R ...	■	■	M4	0.7	12	4	3	2	0.5	0.432	40	0.05	0.06	SDA 4...
SDV 448 300 R ...	■	■	M3	0.5	15	4	2.2	1.5	0.37	0.316	48	0.04	0.06	SDA 4...
SDV 448 350 R ...	■	■	M3.5	0.6	17.5	4	2.6	1.75	0.43	0.374	48	0.04	0.06	SDA 4...
SDV 448 400 R ...	■	■	M4	0.7	20	4	3	2	0.5	0.432	48	0.05	0.06	SDA 4...
SDV 644 500 R ...	■	■	M5	0.8	10	6	3.8	2.5	0.57	0.5	44	0.05	0.07	SDA 6...
SDV 644 600 R ...	■	■	M6/7	1	12	6	4.6	3	0.7	0.62	44	0.05	0.08	SDA 6...
SDV 644 800 R ...	■	■	M8	1.25	12	6	5.62	3	0.86	0.78	44	0.05	0.09	SDA 6...
SDV 656 500 R ...	■	■	M5	0.8	20	6	3.8	2.5	0.57	0.5	56	0.05	0.07	SDA 6...
SDV 656 600 R ...	■	■	M6/M7	1	24	6	4.6	3	0.7	0.62	56	0.05	0.08	SDA 6...
SDV 656 800 R ...	■	■	M8	1.25	24	6	5.62	3	0.86	0.78	56	0.05	0.09	SDA 6...
SDV 668 500 R ...	■	■	M5	0.8	30	6	3.8	2.5	0.57	0.5	68	0.05	0.07	SDA 6...
SDV 668 600 R ...	■	■	M6/7	1	36	6	4.6	3	0.7	0.62	68	0.05	0.08	SDA 6...
SDV 668 800 R ...	■	■	M8	1.25	36	6	5.62	3	0.86	0.78	68	0.05	0.09	SDA 6...

\* Left execution and other coatings on demand

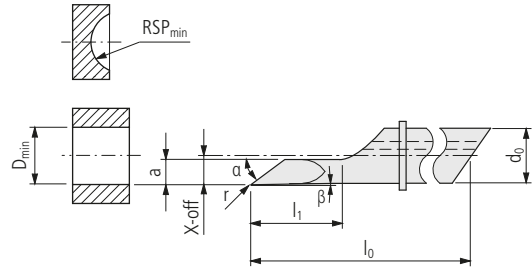
Application recommendation for number of passes at threading □ 154



Copy turning (axial)

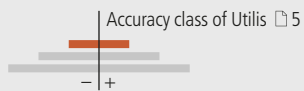


SXJ ...



Order designation	Carbide		15	Dimensions										Holder			
	UHM 20	UHM 20 HX		D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	RSP <sub>min</sub>	r	l <sub>0</sub>	α	β				
	○	●															□ 320...

**PREMIUM-LINE**



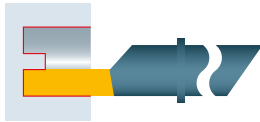
SXJ 435 042 R ...	■	■	0.42	1.5	4	0.19	0.13	0.45	0.08	35	30°	1.5°				SDA 4...
SXJ 435 092 R ...	■	■	0.92	3	4	0.41	0.38	0.95	0.08	35	30°	1.5°				SDA 4...
SXJ 435 142 R ...	■	■	1.42	4.5	4	0.64	0.63	1.45	0.08	35	30°	1.5°				SDA 4...
SXJ 435 192 R ...	■	■	1.92	6	4	0.86	0.88	1.95	0.08	35	30°	1.5°				SDA 4...
SXJ 435 242 R ...	■	■	2.42	7.5	4	1.09	1.13	2.45	0.08	35	30°	1.5°				SDA 4...
SXJ 440 292 R ...	■	■	2.92	9	4	1.31	1.38	2.95	0.08	40	30°	1.5°				SDA 4...
SXJ 440 342 R ...	■	■	3.42	10.5	4	1.54	1.63	3.45	0.08	40	30°	1.5°				SDA 4...
SXJ 440 392 R ...	■	■	3.92	12	4	1.76	1.88	3.95	0.08	40	30°	1.5°				SDA 4...
SXJ 440 092 R ...	■	■	0.92	5	4	0.41	0.38	0.95	0.08	40	30°	1.5°				SDA 4...
SXJ 440 142 R ...	■	■	1.42	7.5	4	0.64	0.63	1.45	0.08	40	30°	1.5°				SDA 4...
SXJ 440 192 R ...	■	■	1.92	10	4	0.86	0.88	1.95	0.08	40	30°	1.5°				SDA 4...
SXJ 440 242 R ...	■	■	2.42	12.5	4	1.09	1.13	2.45	0.08	40	30°	1.5°				SDA 4...
SXJ 448 292 R ...	■	■	2.92	15	4	1.31	1.38	2.95	0.08	48	30°	1.5°				SDA 4...
SXJ 448 342 R ...	■	■	3.42	17.5	4	1.54	1.63	3.45	0.08	48	30°	1.5°				SDA 4...
SXJ 448 392 R ...	■	■	3.92	20	4	1.76	1.88	3.95	0.08	48	30°	1.5°				SDA 4...
SXJ 644 442 R ...	■	■	4.42	9	6	1.99	2.09	4.45	0.12	44	30°	1.5°				SDA 6...
SXJ 644 492 R ...	■	■	4.92	10	6	2.21	2.34	4.95	0.12	44	30°	1.5°				SDA 6...
SXJ 644 542 R ...	■	■	5.42	11	6	2.44	2.59	5.45	0.12	44	30°	1.5°				SDA 6...
SXJ 644 592 R ...	■	■	5.92	12	6	2.66	2.84	5.95	0.12	44	30°	1.5°				SDA 6...
SXJ 656 442 R ...	■	■	4.42	18	6	1.99	2.09	4.45	0.12	56	30°	1.5°				SDA 6...
SXJ 656 492 R ...	■	■	4.92	20	6	2.21	2.34	4.95	0.12	56	30°	1.5°				SDA 6...
SXJ 656 542 R ...	■	■	5.42	22	6	2.44	2.59	5.45	0.12	56	30°	1.5°				SDA 6...
SXJ 656 592 R ...	■	■	5.92	24	6	2.66	2.84	5.95	0.12	56	30°	1.5°				SDA 6...
SXJ 668 442 R ...	■	■	4.42	27	6	1.99	2.09	4.45	0.12	68	30°	1.5°				SDA 6...
SXJ 668 492 R ...	■	■	4.92	30	6	2.21	2.34	4.95	0.12	68	30°	1.5°				SDA 6...
SXJ 668 542 R ...	■	■	5.42	33	6	2.44	2.59	5.45	0.12	68	30°	1.5°				SDA 6...
SXJ 668 592 R ...	■	■	5.92	36	6	2.66	2.84	5.95	0.12	68	30°	1.5°				SDA 6...
SXJ 850 692 R ...	■	■	6.92	14	8	3.11	3.3	6.95	0.16	50	30°	1.5°				SDA 8...
SXJ 850 792 R ...	■	■	7.92	16	8	3.56	3.8	7.95	0.16	50	30°	1.5°				SDA 8...
SXJ 866 692 R ...	■	■	6.92	28	8	3.11	3.3	6.95	0.16	66	30°	1.5°				SDA 8...
SXJ 866 792 R ...	■	■	7.92	32	8	3.56	3.8	7.95	0.16	66	30°	1.5°				SDA 8...
SXJ 882 692 R ...	■	■	6.92	42	8	3.11	3.3	6.95	0.16	82	30°	1.5°				SDA 8...
SXJ 882 792 R ...	■	■	7.92	48	8	3.56	3.8	7.95	0.16	82	30°	1.5°				SDA 8...

\* Left execution and other coatings on demand

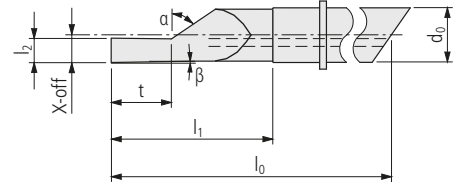
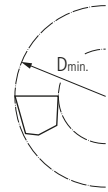
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UTILIS multidec® swiss type tools





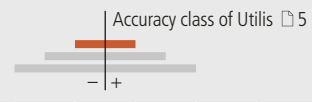
Grooving (axial)



SXP ...

Order designation	Carbide □15		Dimensions											Holder	
			D <sub>min</sub>	l <sub>1</sub>	d <sub>0</sub>	a	X-off	t	l <sub>0</sub>	α	β				□320...
<b>R</b>															
	UHM 20	UHM 20 HX													

**PREMIUM-LINE**



SXP 435 142 R ...	■	■	1.42	4.5	4	0.35	0.71	0.8	35	45°	1.5°				SDA 4...
SXP 435 192 R ...	■	■	1.92	6	4	0.35	0.96	0.8	35	45°	1.5°				SDA 4...
SXP 435 242 R ...	■	■	2.42	7.5	4	0.35	1.21	0.8	35	45°	1.5°				SDA 4...
SXP 440 142 R ...	■	■	1.42	7.5	4	0.35	0.71	0.8	40	45°	1.5°				SDA 4...
SXP 440 192 R ...	■	■	1.92	10	4	0.35	0.96	0.8	40	45°	1.5°				SDA 4...
SXP 440 242 R ...	■	■	2.42	12.5	4	0.35	1.21	0.8	40	45°	1.5°				SDA 4...
SXP 440 292 R ...	■	■	2.92	9	4	0.35	1.46	0.8	40	45°	1.5°				SDA 4...
SXP 440 342 R ...	■	■	3.42	10.5	4	0.35	1.71	0.8	40	45°	1.5°				SDA 4...
SXP 440 392 R ...	■	■	3.92	12	4	0.35	1.96	0.8	40	45°	1.5°				SDA 4...
SXP 448 292 R ...	■	■	2.92	15	4	0.35	1.46	0.8	48	45°	1.5°				SDA 4...
SXP 448 342 R ...	■	■	3.42	17.5	4	0.35	1.71	0.8	48	45°	1.5°				SDA 4...
SXP 448 392 R ...	■	■	3.92	20	4	0.35	1.96	0.8	48	45°	1.5°				SDA 4...
SXP 644 442 R ...	■	■	4.42	9	6	0.5	2.21	1.2	44	45°	1.5°				SDA 6...
SXP 644 492 R ...	■	■	4.92	10	6	0.5	2.46	1.2	44	45°	1.5°				SDA 6...
SXP 644 542 R ...	■	■	5.42	11	6	0.5	2.71	1.2	44	45°	1.5°				SDA 6...
SXP 644 592 R ...	■	■	5.92	12	6	0.5	2.96	1.2	44	45°	1.5°				SDA 6...
SXP 656 442 R ...	■	■	4.42	18	6	0.5	2.21	1.2	56	45°	1.5°				SDA 6...
SXP 656 492 R ...	■	■	4.92	20	6	0.5	2.46	1.2	56	45°	1.5°				SDA 6...
SXP 656 542 R ...	■	■	5.42	22	6	0.5	2.71	1.2	56	45°	1.5°				SDA 6...
SXP 656 592 R ...	■	■	5.92	24	6	0.5	2.96	1.2	56	45°	1.5°				SDA 6...
SXP 668 442 R ...	■	■	4.42	27	6	0.5	2.21	1.2	68	45°	1.5°				SDA 6...
SXP 668 492 R ...	■	■	4.92	30	6	0.5	2.46	1.2	68	45°	1.5°				SDA 6...
SXP 668 542 R ...	■	■	5.42	33	6	0.5	2.71	1.2	68	45°	1.5°				SDA 6...
SXP 668 592 R ...	■	■	5.92	36	6	0.5	2.96	1.2	68	45°	1.5°				SDA 6...
SXP 850 692 R ...	■	■	6.92	14	8	0.75	3.46	1.6	50	45°	1.5°				SDA 8...
SXP 850 792 R ...	■	■	7.92	16	8	0.75	3.96	1.6	50	45°	1.5°				SDA 8...
SXP 866 692 R ...	■	■	6.92	28	8	0.75	3.46	1.6	66	45°	1.5°				SDA 8...
SXP 866 792 R ...	■	■	7.92	32	8	0.75	3.96	1.6	66	45°	1.5°				SDA 8...
SXP 882 692 R ...	■	■	6.92	42	8	0.75	3.46	1.6	82	45°	1.5°				SDA 8...
SXP 882 792 R ...	■	■	7.92	48	8	0.75	3.96	1.6	82	45°	1.5°				SDA 8...

\* Left execution and other coatings on demand

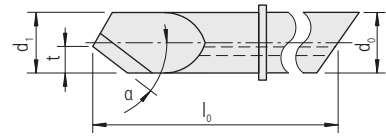
Pay attention to the "working situations" for the correct selection of the combinations of tools and inserts □24

**Attention**  
The groove must not be made underneath the D<sub>min</sub>-position.

Legend □4



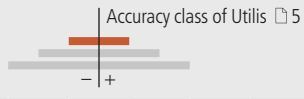
Chamfering



SDY ...

Order designation	Carbide		Dimensions															Holder	
	15	15	d <sub>0</sub>	d <sub>1</sub>	t	l <sub>0</sub>	α												320...
R *	○	●																	
	○	●																	
	○	●																	
	●	○																	
	UHM 20	UHM 20 HX																	

**PREMIUM-LINE**

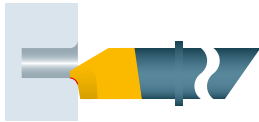


SDY 440 400-30 R ...	■	■	4	4	1.75	40	30°												SDA 4...
SDY 440 400-45 R ...	■	■	4	4	1.75	40	45°												SDA 4...
SDY 440 400-60 R ...	■	■	4	4	1.75	40	60°												SDA 4...
SDY 644 600-30 R ...	■	■	6	6	2.75	44	30°												SDA 6...
SDY 644 600-45 R ...	■	■	6	6	2.75	44	45°												SDA 6...
SDY 644 600-60 R ...	■	■	6	6	2.75	44	60°												SDA 6...

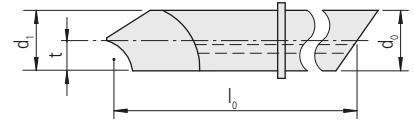
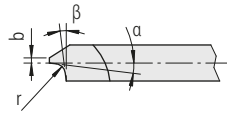
\* Left execution and other coatings on demand

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UTILIS multidec® swiss type tools



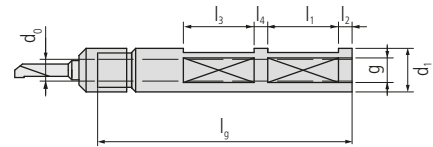
Radius



SDZ ...

Order designation	Carbide		Dimensions											Holder	
	□ 15	□ 15	d <sub>0</sub>	d <sub>1</sub>	b	t	l <sub>0</sub>	r	α	β					□ 320...
<b>R</b> *	UHM 20	UHM 20 HX													
Accuracy class of Utilis □ 5															
<b>PREMIUM-LINE</b>															
SDZ 440 400-03 R ...	■	■	4	4	0.4	1.75	40	0.3	7°	7°					SDA 4...
SDZ 440 400-05 R ...	■	■	4	4	0.4	1.75	40	0.5	7°	7°					SDA 4...
SDZ 440 400-10 R ...	■	■	4	4	0.4	1.75	40	1	7°	7°					SDA 4...
SDZ 644 600-05 R ...	■	■	6	6	0.6	2.75	44	0.5	7°	7°					SDA 6...
SDZ 644 600-10 R ...	■	■	6	6	0.6	2.75	44	1	7°	7°					SDA 6...
SDZ 644 600-15 R ...	■	■	6	6	0.6	2.75	44	1.5	7°	7°					SDA 6...

\* Left execution and other coatings on demand

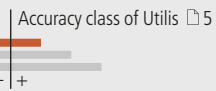


SDA ...

Order designation	Dimensions										Inserts □ 299...
	d <sub>0</sub>	d <sub>1</sub>	g	l <sub>g</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>			

**N**

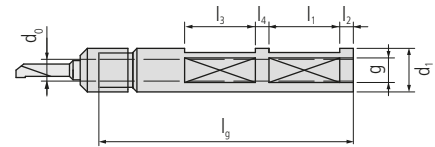
**PREMIUM-LINE**



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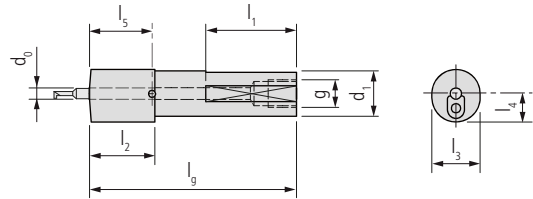
UTILIS  
**multidec**<sup>®</sup>  
swiss type tools

SDA 4 060 07	■	4	7	M5	60	–	–	–	–			SD.4... / SX.4...
SDA 4 060 08	■	4	8	M5	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 10	■	4	10	M5	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 12	■	4	12	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 12.7	■	4	12.7	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 14	■	4	14	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 16	■	4	16	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 18	■	4	18	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 19.05	■	4	19.05	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 20	■	4	20	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 22	■	4	22	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 25	■	4	25	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 25.4	■	4	25.4	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 060 28	■	4	28	R 1/8"	60	27	5	–	–			SD.4... / SX.4...
SDA 4 100 08	■	4	8	R 1/8"	100	27	5	–	–			SD.4... / SX.4...
SDA 4 100 10	■	4	10	R 1/8"	100	27	5	–	–			SD.4... / SX.4...
SDA 4 120 12	■	4	12	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 12.7	■	4	12.7	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 14	■	4	14	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 16	■	4	16	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 18	■	4	18	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 19.05	■	4	19.05	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 20	■	4	20	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 175 20	■	4	20	R 1/8"	175	27	5	27	5			SD.4... / SX.4...
SDA 4 120 22	■	4	22	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 25	■	4	25	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 25.4	■	4	25.4	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 4 120 28	■	4	28	R 1/8"	120	27	5	27	5			SD.4... / SX.4...
SDA 6 065 12	■	6	12	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 12.7	■	6	12.7	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 14	■	6	14	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 16	■	6	16	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 18	■	6	18	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 19.05	■	6	19.05	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 20	■	6	20	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 22	■	6	22	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 25	■	6	25	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 25.4	■	6	25.4	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 065 28	■	6	28	R 1/8"	65	27	5	–	–			SD.6... / SX.6...
SDA 6 100 12	■	6	12	R 1/8"	100	27	5	–	–			SD.6... / SX.6...
SDA 6 120 12.7	■	6	12.7	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 14	■	6	14	R 1/8"	120	27	5	27	5			SD.6... / SX.6...



Order designation	Dimensions										Inserts □ 299...	
	d <sub>0</sub>	d <sub>1</sub>	g	l <sub>g</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>				
<b>N</b>												
Accuracy class of Utilis □ 5												
<b>PREMIUM-LINE</b>												
SDA 6 120 16	■	6	16	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 18	■	6	18	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 19.05	■	6	19.05	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 20	■	6	20	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 22	■	6	22	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 25	■	6	25	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 25.4	■	6	25.4	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 6 120 28	■	6	28	R 1/8"	120	27	5	27	5			SD.6... / SX.6...
SDA 8 070 14	■	8	14	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 16	■	8	16	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 19.05	■	8	19.05	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 20	■	8	20	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 22	■	8	22	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 25	■	8	25	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 25.4	■	8	25.4	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 070 28	■	8	28	R 1/8"	70	27	5	—	—			SD.8... / SX.8...
SDA 8 100 14	■	8	14	R 1/8"	100	27	5	—	—			SD.8... / SX.8...
SDA 8 120 16	■	8	16	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 18	■	8	18	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 19.05	■	8	19.05	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 20	■	8	20	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 22	■	8	22	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 25	■	8	25	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 25.4	■	8	25.4	R 1/8"	120	27	5	27	5			SD.8... / SX.8...
SDA 8 120 28	■	8	28	R 1/8"	120	27	5	27	5			SD.8... / SX.8...

Reduction sleeve □ 571

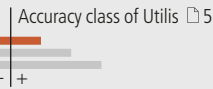


SDA ... SC

Order designation	Dimensions										Inserts
N	d <sub>0</sub>	d <sub>1</sub>	g	l <sub>9</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>		□ 299...

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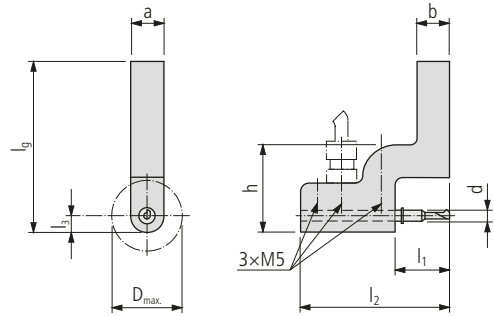
**PREMIUM-LINE**



SDA 4 073 050 07 SC	■	4	7	M5	73	32	23	9	10	22.5		SD.4... / SX.4...
SDA 4 073 050 08 SC	■	4	8	M5	73	32	23	9	10	22.5		SD.4... / SX.4...
SDA 4 073 050 10 SC	■	4	10	M5	73	32	23	11	10	22.5		SD.4... / SX.4...
SDA 4 073 050 12 SC	■	4	12	G1/8"	73	32	23	13	10	22.5		SD.4... / SX.4...
SDA 4 073 050 12.7 SC	■	4	12.7	G1/8"	73	32	23	13	10	22.5		SD.4... / SX.4...
SDA 4 073 050 16 SC	■	4	16	G1/8"	73	32	23	17	10	22.5		SD.4... / SX.4...
SDA 4 073 050 19.05 SC	■	4	19.05	G1/8"	73	32	23	20	10	22.5		SD.4... / SX.4...
SDA 4 073 000 20 SC	■	4	20	G1/8"	73	32	—	20	10	22.5		SD.4... / SX.4...
SDA 4 073 000 28 SC	■	4	28	G1/8"	73	—	—	25	14	22.5		SD.4... / SX.4...
SDA 4 133 110 19.05 SC	■	4	19.05	G1/8"	133	64	23	20	10	22.5		SD.4... / SX.4...
SDA 4 133 000 25 SC	■	4	25	G1/8"	133	64	—	25	12.5	22.5		SD.4... / SX.4...
SDA 4 133 000 25.40 SC	■	4	25.4	G1/8"	133	64	—	25.4	12.7	22.5		SD.4... / SX.4...
SDA 6 078 055 12 SC	■	6	12	G1/8"	78	32	23	13	11.2	26.2		SD.6... / SX.6...
SDA 6 078 055 12.7 SC	■	6	12.7	G1/8"	78	32	23	13	11.2	26.2		SD.6... / SX.6...
SDA 6 078 055 16 SC	■	6	16	G1/8"	78	32	23	17	11.2	26.2		SD.6... / SX.6...
SDA 6 078 055 19.05 SC	■	6	19.05	G1/8"	78	32	23	20	11.2	26.2		SD.6... / SX.6...
SDA 6 078 055 20 SC	■	6	20	G1/8"	78	32	23	20	11.2	26.2		SD.6... / SX.6...
SDA 6 078 000 28 SC	■	6	28	G1/8"	78	—	—	25	14	26.2		SD.6... / SX.6...
SDA 6 133 110 19.05 SC	■	6	19.05	G1/8"	133	64	23	20	11.2	26.2		SD.6... / SX.6...
SDA 6 133 000 22 SC	■	6	22	G1/8"	133	64	—	22	11.5	26.2		SD.6... / SX.6...
SDA 8 083 060 14 SC	■	8	14	G1/8"	83	32	23	17	12.3	27.9		SD.8... / SX.8...
SDA 8 083 060 16 SC	■	8	16	G1/8"	83	32	23	17	12.3	27.9		SD.8... / SX.8...
SDA 8 083 060 19.05 SC	■	8	19.05	G1/8"	83	32	23	20	12.3	27.9		SD.8... / SX.8...
SDA 8 083 060 20 SC	■	8	20	G1/8"	83	32	23	20	12.3	27.9		SD.8... / SX.8...
SDA 8 083 000 28 SC	■	8	28	G1/8"	83	—	—	25	14	27.9		SD.8... / SX.8...

Reduction sleeve □ 571

UTILIS  
**multidec**<sup>®</sup>  
swiss type tools



AKR M...

Order designation	Dimensions										Inserts
<b>R</b>	a	b	D <sub>max</sub>	h	d	l <sub>g</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>		□ 299...



**PREMIUM-LINE**

Accuracy class of Utilis □ 5



AKR M 0808x100 D4-3540	■	8	8	26	30	4	104	20	55	4		SD.4.../SX.4...
AKR M 0808x100 D4-48	■	8	8	26	30	4	104	30	65	4		SD.448.../SX.448...
AKR M 1010x100 D4-3540	■	10	10	26	31	4	105	20	55	5		SD.4.../SX.4...
AKR M 1010x100 D4-48	■	10	10	26	31	4	105	30	65	5		SD.448.../SX.448...
AKR M 1212x100 D4-3540	■	12	12	26	32	4	106	20	55	6		SD.4.../SX.4...
AKR M 1212x100 D4-48	■	12	12	26	32	4	106	30	65	6		SD.448.../SX.448...
AKR M 1/2"x100 D4-3540	■	12.7	12.7	26	32.5	4	106.5	20	55	6.5		SD.4.../SX.4...
AKR M 1/2"x100 D4-48	■	12.7	12.7	26	32.5	4	106.5	30	65	6.5		SD.448.../SX.448...
AKR M 1616x125 D4-3540	■	16	16	26	34	4	133	20	55	8		SD.4.../SX.4...
AKR M 1616x125 D4-48	■	16	16	26	34	4	133	30	65	8		SD.448.../SX.448...
AKR M 1010x100 D6-44	■	10	10	26	32	6	105	21.5	61	5		SD.644.../SX.644...
AKR M 1010x100 D6-56	■	10	10	26	32	6	105	33.5	73	5		SD.656.../SX.656...
AKR M 1010x100 D6-68	■	10	10	26	32	6	105	45.5	85	5		SD.668.../SX.668...
AKR M 1212x100 D6-44	■	12	12	26	33	6	106	21.5	61	6		SD.644.../SX.644...
AKR M 1212x100 D6-56	■	12	12	26	33	6	106	33.5	73	6		SD.656.../SX.656...
AKR M 1212x100 D6-68	■	12	12	26	33	6	106	45.5	85	6		SD.668.../SX.668...
AKR M 1/2"x100 D6-44	■	12.7	12.7	26	33.5	6	106.5	21.5	61	6.5		SD.644.../SX.644...
AKR M 1/2"x100 D6-56	■	12.7	12.7	26	33.5	6	106.5	33.5	73	6.5		SD.656.../SX.656...
AKR M 1/2"x100 D6-68	■	12.7	12.7	26	33.5	6	106.5	45.5	85	6.5		SD.668.../SX.668...
AKR M 1616x125 D6-44	■	16	16	26	35	6	133	21.5	61	8		SD.644.../SX.644...
AKR M 1616x125 D6-56	■	16	16	26	35	6	133	33.5	73	8		SD.656.../SX.656...
AKR M 1616x125 D6-68	■	16	16	26	35	6	133	45.5	85	8		SD.668.../SX.668...



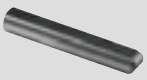
For holders (SDA ...)

Illustration	Description	Dimensions	Order designation	Inserts	Holder
	Nut	M8 × 0.5	MSP SDA 4M	■	SDA 4...
		M12 × 0.6	MSP SDA 6M	■	SDA 6...
		M14 × 0.75	MSP SDA 8M	■	SDA 8...
	Aligning device		SDA 4X	■	SDA 4...
			SDA 6X	■	SDA 6...
			SDA 8X	■	SDA 8...
	Retaining ring		MSP SDA 4S	■	SD. 4...
			MSP SDA 6S	■	SD. 6...
			MSP SDA 8S	■	SD. 8...

For holders (SDA ...SC)

Illustration	Description	Dimensions	Order designation	Holder
	Grub screw	M4 × 15 L/R	MSP 40150 T08	■ SDA ...SC
	Thrust piece		MSP SDA DS	■ SDA ...SC
	Torx screwdriver	TX 08	MSP TX08 SDA SC	■ SDA ...SC

For holders (AKR M...)

Illustration	Description	Dimensions	Order designation	Holder
	Clamping screw	M5 × 10	MSP 50100 IB2.5	■ AKR M...
	Allen key	SW 2.5	MSP IB2.5	■ AKR M...
	Stop-Pin	4 × 25	MSP 40250 AN D4	■ AKR M...D4
		6 × 30	MSP 60300 AN D6	■ AKR M...D6



	Steel unalloyed			Steel low alloyed			Steel high alloyed			Titanium		
Hardness value (HB)	125–300			180–250			200–350			–		
Category	I			II			III			IV		
Machining method	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼
Cutting speeds	$v_c$ (m/min)											
Cutting material carbide												
UHM 20	–	–	20–120	–	–	20–100	–	–	20–90	–	–	20–70
UHM 20 HX	–	–	30–160	–	–	30–140	–	–	30–130	–	–	30–100

	Stainless steel			Stainless steel			Aluminum			Brass		
Hardness value (HB)	180–220			220–330			60–130			–		
Category	V			VI			VII			VIII		
Machining method	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼	▼	▼▼	▼▼▼
Cutting speeds	$v_c$ (m/min)											
Cutting material carbide												
UHM 20	–	–	20–80	–	–	20–60	–	–	50–220	–	–	30–110
UHM 20 HX	–	–	30–120	–	–	30–100	–	–	60–350	–	–	50–180

Feed (f) and depths of cut (ap) □ 326

**SDG – SXG – SDH – SDI – SXI – SDY – SDZ**

D (mm)	Steel unalloyed		Steel low alloyed		Steel high alloyed		Stainless steel		Titanium		Aluminum		Brass	
	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)
≤1	0.01–0.02	0.1–0.2	0.01–0.017	0.1–0.17	0.007–0.017	0.07–0.17	0.007–0.017	0.07–0.17	0.006–0.02	0.06–0.2	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25
2	0.012–0.022	0.12–0.22	0.012–0.02	0.12–0.2	0.008–0.018	0.08–0.18	0.008–0.018	0.08–0.18	0.008–0.02	0.08–0.2	0.015–0.03	0.15–0.3	0.015–0.03	0.15–0.3
3	0.015–0.025	0.15–0.25	0.014–0.024	0.14–0.24	0.009–0.019	0.09–0.19	0.009–0.019	0.09–0.19	0.01–0.02	0.1–0.2	0.015–0.035	0.15–0.35	0.015–0.035	0.15–0.35
4	0.015–0.027	0.15–0.27	0.015–0.025	0.15–0.25	0.01–0.02	0.1–0.2	0.01–0.02	0.1–0.2	0.01–0.02	0.1–0.2	0.015–0.035	0.15–0.35	0.015–0.035	0.15–0.35
6	0.015–0.03	0.15–0.3	0.015–0.025	0.15–0.25	0.01–0.02	0.1–0.2	0.01–0.02	0.1–0.2	0.01–0.025	0.1–0.25	0.015–0.04	0.15–0.4	0.015–0.04	0.15–0.4
8	0.015–0.03	0.15–0.3	0.015–0.025	0.15–0.25	0.01–0.02	0.1–0.2	0.01–0.02	0.1–0.2	0.01–0.025	0.1–0.25	0.015–0.05	0.15–0.5	0.015–0.04	0.15–0.4

**SDK – SDM – SDO – SDQ – SDT – SXJ – SXP**

D (mm)	Steel unalloyed		Steel low alloyed		Steel high alloyed		Stainless steel		Titanium		Aluminum		Brass	
	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)	f (mm)	a <sub>p</sub> (mm)
≤1	0.01–0.02	0.1–0.2	0.01–0.017	0.1–0.17	0.007–0.015	0.07–0.15	0.007–0.015	0.07–0.15	0.006–0.012	0.06–0.12	0.007–0.012	0.07–0.12	0.007–0.012	0.07–0.12
2	0.01–0.022	0.1–0.22	0.01–0.02	0.1–0.2	0.008–0.017	0.08–0.17	0.008–0.017	0.08–0.17	0.008–0.015	0.08–0.15	0.01–0.015	0.1–0.15	0.01–0.015	0.1–0.15
3	0.01–0.025	0.1–0.25	0.01–0.022	0.1–0.22	0.009–0.02	0.09–0.2	0.009–0.02	0.09–0.2	0.008–0.017	0.08–0.17	0.01–0.02	0.1–0.2	0.01–0.02	0.1–0.2
4	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.01–0.022	0.1–0.22	0.01–0.022	0.1–0.22	0.008–0.02	0.08–0.2	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25
6	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.008–0.02	0.08–0.2	0.01–0.03	0.1–0.3	0.01–0.03	0.1–0.3
8	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.01–0.025	0.1–0.25	0.008–0.02	0.08–0.2	0.01–0.035	0.1–0.35	0.01–0.03	0.1–0.3

**SDR – SDS**

	Steel unalloyed	Steel low alloyed	Steel high alloyed	Stainless steel	Titanium	Aluminum	Brass
	f (mm)	f (mm)	f (mm)	f (mm)	f (mm)	f (mm)	f (mm)
	0.007–0.020	0.005–0.015	0.005–0.015	0.005–0.015	0.005–0.015	0.007–0.020	0.007–0.020

**SDU – SDV (Threading)**

Application recommendation for number of passes □ 154

326

UTILIS multidec® swiss type tools

Lined area for notes.

**Attention**  
Please note the legend

4...

In thread milling, the thread is produced by helical interpolation. The cutting process enables multi-profile and single-profile threads to be obtained with a nominal diameter of 1 mm or more.



**Advantages:**

- The thread depth is equal to the drill depth
- Lower torque than with tapping and roll form tapping
- Short milling chips avoid chip problems
- High Speed Cutting (HSC) possible
- Reliable process with longer life time