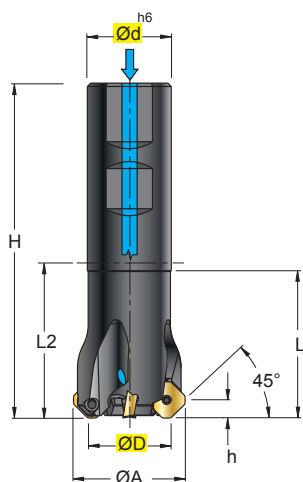


S406		S409		S8801-8W	
Pag. B 158		Pag. B 158		Pag. B 164	
 <p>ØD = 6 - 32</p>		 <p>ØD = 32 - 100</p>		 <p>ØD = 50 - 250</p>	
S 406W .. 09		S 409W .. 09 S 409WF .. 09 S 409GW .. 09		S 8801-8W .. 12	
 <p>45° SD..0903</p>		h = 4		 <p>88° SN..1206</p>	
				h = 11,5	
S438		Pag. B 160			
		ØD = 50 - 315			
S 438 .. 13 S 438F .. 13 S 438G .. 13					
 <p>45° SE..13T3</p>		h = 6			
S4501		Pag. B 162			
		ØD = 50 - 250			
S 4501-8W .. 12					
 <p>45° SN..1206</p>		h = 6			

**S 406W .. 09**

Ø 06-32

$\gamma_p$  0°/+12°  
 $\gamma_f$  -11°/-6,5°  
 $\gamma_o$  -8°/+4°

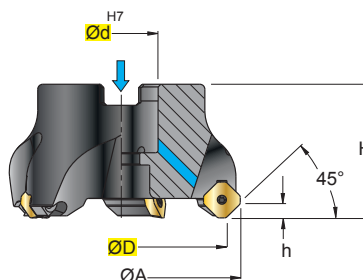
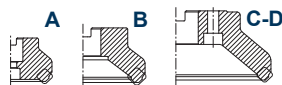


**S 409W .. 09**  
**S 409WF .. 09**  
**S 409GW .. 09**

Ø 32-100

$\gamma_p$  +12°  
 $\gamma_f$  -6,5°/-6°  
 $\gamma_o$  +4°/+5°

ISO 6462 ...



SDHW 0903  
.Z42



SDHT 0903  
.L51



SDNT 0903  
.L54



SDKT 0903  
.L56

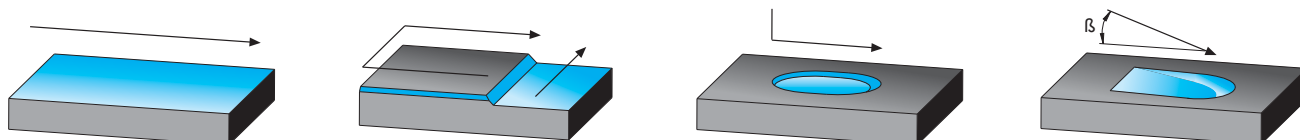


SDEX 0903  
.L58



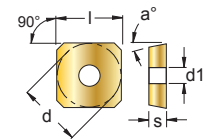
INSERTI - INSERTS  
PAG. B 267

ART.	(mm)													ISO 6462	Image	Screw	Screw	Screw
	ØD	Ød	ØA	H	h	L	L2	β	Z	kg	Nm							
S 406W 006 - 09	6	16	14,2	80	4	32	32	10,5°	1	0,12	1,2±1,5	-	0903	123006	5608	-		
S 406W 012 - 09	12	16	20,2	80	4	32	32	3°	1	0,13	1,2±1,5	-	0903	123008P	5608	-		
S 406W 016 - 09	16	20	24,2	90	4	40	40	28,5°	2	0,19	1,2±1,5	-	0903	123008P	5608	-		
S 406W 020 - 09	20	20	28,2	90	4	40	40	19,5°	3	0,20	1,2±1,5	-	0903	123008P	5608	-		
S 406W 025 - 09	25	25	33,2	100	4	44	44	13,5°	4	0,35	1,2±1,5	-	0903	123008P	5608	-		
S 406W 032 - 09	32	25	40,2	95	4	39	39	9,5°	5	0,36	1,2±1,5	-	0903	123008P	5608	-		
S 409W 032 - 09	32	16	40,2	40	4	-	-	9,5°	3	0,19	1,2±1,5	A	0903	123008P	5608P	VBSF08C		
S 409W 040 - 09	40	16	48,2	40	4	-	-	7°	4	0,26	1,2±1,5	A	0903	123008P	5608P	VBSF10		
S 409W 050 - 09	50	22	58,2	40	4	-	-	5,5°	6	0,37	1,2±1,5	A	0903	123008P	5608P	VBSF10		
S 409W 063 - 09	63	22	71,2	40	4	-	-	4°	8	0,55	1,2±1,5	A	0903	123008P	5608P	VBSF12		
S 409W 080 - 09	80	27	88,2	50	4	-	-	3°	10	1,09	1,2±1,5	A	0903	123008P	5608P	VBSF12		
S 409W 100 - 09	100	32	108,2	50	4	-	-	2,5°	12	1,74	1,2±1,5	A	0903	123008P	5608P	AL16x35		
S 409WF 032 - 09	32	16	40,2	40	4	-	-	9,5°	5	0,19	1,2±1,5	A	0903	123008P	5608P	VBSF08C		
S 409WF 040 - 09	40	16	48,2	40	4	-	-	7°	6	0,26	1,2±1,5	A	0903	123008P	5608P	VBSF10		
S 409WF 050 - 09	50	22	58,2	40	4	-	-	5,5°	8	0,36	1,2±1,5	A	0903	123008P	5608P	VBSF10		
S 409WF 063 - 09	63	22	71,2	40	4	-	-	4°	10	0,55	1,2±1,5	A	0903	123008P	5608P	VBSF12		
S 409WF 080 - 09	80	27	88,2	50	4	-	-	3°	12	1,20	1,2±1,5	A	0903	123008P	5608P	VBSF12		
S 409WF 100 - 09	100	32	108,2	50	4	-	-	2,5°	14	1,76	1,2±1,5	A	0903	123008P	5608P	AL16x35		
S 409GW 063 - 09	63	22	71,2	40	4	-	-	4°	5	0,60	1,2±1,5	A	0903	123008P	5608P	VBSF10		
S 409GW 080 - 09	80	27	88,2	50	4	-	-	3°	6	1,06	1,2±1,5	A	0903	123008P	5608P	VBSF12		
S 409GW 100 - 09	100	32	108,2	50	4	-	-	2,5°	7	1,71	1,2±1,5	A	0903	123008P	5608P	AL16x35		



W = FORO PER LIQUIDO REFRIGERANTE - COOLANT BORE - KÜHLMITTELBOHRUNG - TROU DU LIQUIDE D'ARROSAGE  
G = PASSO GROSSO - LARGE TEETH DISTANCE - NORMALE ZAHNTEILUNG - GRANDE DISTANCE DENTS.  
F = PASSO FINE - FINE PITCH - FEINE ZAHNTEILUNG - PAS FIN

**SCelta VELOCE - QUICK PICK**



COD.	P			M			K			N			S			H			HT	HW	HC					l	d	s	d1	r	a°
	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R			DT61	N3105	T518M	F1040	T533						
SDHW 0903 AESN .Z42	●	○																							9,52	9,52	3,2	3,4	-	15	
SDHT 0903 AESN .L51	○	○		●	●								●	●	○										9,52	9,52	3,2	3,4	-	15	
SDNT 0903 AESN .L54	●	●		●	●		●	●																	9,52	9,52	3,2	3,4	-	15	
SDKT 0903 AESN .L56	○	●	○	○	○		○	○																	9,52	9,52	3,2	3,4	-	15	
SDEX 0903 AEFN .L58							●	●																	9,52	9,52	3,2	3,4	-	15	

CON ADDUZIONE LUBROREFRIGERANTE - WITH COOLANT SUPPLY

SENZA ADDUZIONE LUBROREFRIGERANTE - WITHOUT COOLANT SUPPLY

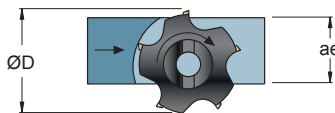
MATERIALI - MATERIALS Pag. H 73		VDI 3323 GR.	HB Rm1) HRC2)	fz0 mm			Vc m/min Pag. B 254							
				F	M	R	DT61	F1040	N3105	T518M	T533			
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1--5	125-300	0,1	0,2		260	260		350	275			
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6-9	180-350	0,08	0,15		250	220		270	210			
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325	0,08	0,15		250	175		200	160			
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240	0,06	0,12		230	110		180	100			
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230	0,06	0,1					200	240			
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260	0,12	0,25					280				
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250	0,1	0,2					230				
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230	0,1	0,2					200				
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21--25	60-130	0,06	0,15	0,25			950					
	RAME E SUE LEGHE - COPPER	26-28	90-110	0,06	0,12	0,2			475					
	NON METALLICI - PLASTICS	29-30	/	0,06	0,12	0,2			950					
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	31--35	200-320	0,05	0,08						85			
	TITANIO E SUE LEGHE - TITANIUM	36-37	400-1050 <sup>n</sup>	0,05	0,08						60			
H	ACCIAIO TEMPRATO - HARDENED STEEL	38-41	45-60 <sup>n</sup>											

$$n = \frac{Vc \cdot 1000}{\phi D \cdot 3,14} = \text{giri/min (min}^{-1}\text{)}$$

$$fz = fz0 \cdot Kae = \text{mm}$$

$$fn = fz \cdot z = \text{mm}$$

$$Vf = fz \cdot z \cdot n = \text{mm/min}$$



ae/D	0,5-1 50-100%	0,2 20%	0,1 10%	0,05 5%	0,02 2%
Kae	1	1,1	1,2	1,3	1,5

ae/D	0,5-1 50-100%	0,2 20%	0,1 10%	0,05 5%
Vc	Vc (min)-----Vc(max)			
Pag. B 254	R-----M-----F			

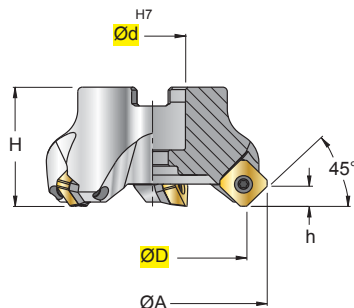
- F = FINITURA, LAV. LEGGERA - FINISHING, LIGHT MACHINING
- M = LAV. MEDIA, GENERICA - MEDIUM MACHINING, GENERIC
- R = SGROSSATURA, LAV. PESANTE - ROUGHING, HEAVY MACHINING

- Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED
- n = giri/min (min<sup>-1</sup>) NUMERO DI GIRI - NUMBER OF REVOLUTIONS
- fz = mm AVANZAMENTO AL DENTE - TOOTH FEED
- fn = mm AVANZAMENTO AL GIRO - FEED / REVOLUTION
- Vf = mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED
- Kae = FATTORE DI CORREZIONE - CORRECTION FACTOR

**S 438 .. 13**  
**S 438F .. 13**  
**S 438G .. 13**

Ø 50-315

$\gamma_p$  +20°/+22,5°  
 $\gamma_f$  -15°/-7°  
 $\gamma_o$  +4°/+10°

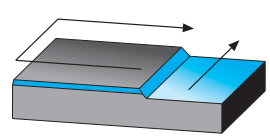
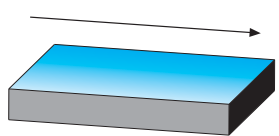


SEEX 13T3.. .M12	
SEKT 13T3.. .L44	
SEKT 13T3.. .L44	
SEKT 13T3.. .L54	
SEKT 13T3.. .L55	
SEKW 13T3.. .L51	
SEKX 1305.. .Z52	



INSERTI - INSERTS  
 PAG. B 268

ART.	(mm)										ISO 6462		Icons							
	ØD	Ød	ØA	H	h	Z	kg	Nm	ISO 6462	ISO 6462	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL10x30		
S 438 050 - 13	50	22	63	40	6	4	0,405	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL10x30			
S 438 063 - 13	63	22	76	40	6	5	0,60	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL12x35			
S 438 080 - 13	80	27	93	50	6	6	1,120	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL16x35			
S 438 100 - 13	100	32	113	50	6	7	1,786	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL20x45			
S 438 125 - 13	125	40	138	63	6	8	3,310	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438 160 - 13	160	40	173	63	6	10	4,070	3,0+3,5	C	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438 200 - 13	200	60	213	63	6	12	6,800	3,0+3,5	B	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438 250 - 13	250	60	263	63	6	14	9,700	3,0+3,5	D	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438 315 - 13	315	60	334	80	6	18	25,30	3,0+3,5	E	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438F 050 - 13	50	22	63	40	6	5	0,4	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL10x30			
S 438F 063 - 13	63	22	76	40	6	6	0,6	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL12x35			
S 438F 080 - 13	80	27	93	50	6	8	1,10	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL16x35			
S 438F 100 - 13	100	32	113	50	6	10	1,74	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	AL20x45			
S 438F 125 - 13	125	40	138	63	6	12	3,250	3,0+3,5	A	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438G 160 - 13	160	40	173	63	6	7	4,3	3,0+3,5	C	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438G 200 - 13	200	60	213	63	6	8	7,0	3,0+3,5	B	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438G 250 - 13	250	60	263	63	6	10	10,0	3,0+3,5	D	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			
S 438G 315 - 13	315	60	334	80	6	12	25,6	3,0+3,5	E	13T3	13T3	PA13M	BCL7	123512P	5035	5615P	-			

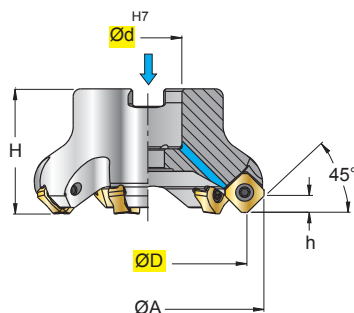
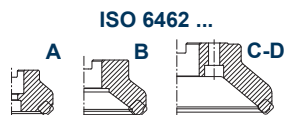




**S 4501-8W .. 12**

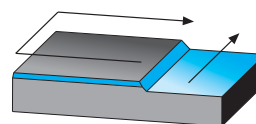
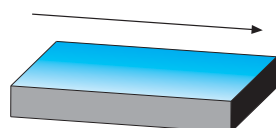
Ø 50-250

$\gamma_p$  -6°  
 $\gamma_f$  -9°/-2°  
 $\gamma_o$  -11°/-6°



 INSERTI - INSERTS  
PAG. B 269

ART.	(mm)						kg	Nm	ISO 6462				
	ØD	Ød	ØA	H	h	Z							
S 4501-8W-050-04-12	50	22	63,4	40	6	4	0,41	3,8+5	A	1206			
S 4501-8W-050-06-12	50	22	63,4	40	6	6	0,41	3,8+5	A				
S 4501-8W-063-06-12	63	22	76,4	40	6	6	0,55	3,8+5	A				
S 4501-8W-063-08-12	63	22	76,4	40	6	8	0,55	3,8+5	A				
S 4501-8W-080-07-12	80	27	93,4	50	6	7	0,98	3,8+5	A	1206			
S 4501-8W-080-10-12	80	27	93,4	50	6	10	0,98	3,8+5	A				
S 4501-8W-100-08-12	100	32	113,4	50	6	8	1,60	3,8+5	A	1206			
S 4501-8W-100-12-12	100	32	113,4	50	6	12	1,60	3,8+5	A				
S 4501-8W-125-10-12	125	40	138,4	63	6	10	3,25	3,8+5	A	1206			
S4501-8W-125-16-12 <b>New</b>	125	40	138,4	63	6	16	3,26	3,8+5	A				
S4501-8-160-12-12 <b>New</b>	160	40	173,4	63	6	12	4,14	3,8+5	C	1206			
S4501-8-160-20-12 <b>New</b>	160	40	173,4	63	6	20	4,16	3,8+5	C				
S4501-8-200-18-12 <b>New</b>	200	60	213,4	63	6	18	6,69	3,8+5	D	1206			
S4501-8-200-26-12 <b>New</b>	200	60	213,4	63	6	26	6,81	3,8+5	D				
S4501-8-250-20-12 <b>New</b>	250	60	263,4	63	6	20	9,40	3,8+5	D	1206			
S4501-8-250-30-12 <b>New</b>	250	60	263,4	63	6	30	9,51	3,8+5	D				

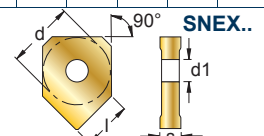


W = FORO PER LIQUIDO REFRIGERANTE - COOLANT BORE - KÜHLMITTELBOHRUNG - TROU DU LIQUIDE D'ARROSAGE

**SCelta VELOCE - QUICK PICK**

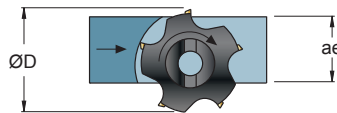


COD.	MATERIALI												HT	HW	HC				SNMX..																				
	P			M			K			N			S			H			CERMET	NON RIV. CEMENTED CARBIDE GRADES	RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS				l	d	s	d1	r	a°									
	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R	F	M	R			F1135	F2430	T1025	T3415							F3010								
SNEX 1206NN .K11	○	○					●	●	○															8,5	12,7	6,35	4,5	-	-										
SNMX 1206NN .F52	●	●	○				●	●	○															12,7	12,7	6,35	4,5	-	-										
SNMX 120612 .F52	○	○	○	○	○	○	○	○	○				○	○	○									12,7	12,7	6,35	4,5	1,2	-										
CON ADDUZIONE LUBROREFRIGERANTE - WITH COOLANT SUPPLY																																							
SENZA ADDUZIONE LUBROREFRIGERANTE - WITHOUT COOLANT SUPPLY																																							



MATERIALI - MATERIALS Pag. H 73			VDI 3323 GR.	HB Rm(1) HRC(2)	fz0 mm			Vc m/min Pag. B 254					
P	M	K	N	S	H	F	M	R	F1135	F2430	F3010	T1025	T3415
ACCIAIO NON LEGATO - NOT ALLOY STEEL	1-5	125-300	0,12	0,25	0,35	230			200	240			
ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6-9	180-350	0,1	0,2	0,3	170			200	240			
ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325	0,1	0,2	0,3	160			180	220			
INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240	0,08	0,15	0,25	160	150	120	160				
INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230	0,06	0,10	0,20	140	150						
GHISA GRIGIA - GREY CAST IRON	15-16	180-260	0,12	0,3	0,4				290	320			
GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250	0,12	0,25	0,35				180	250			
GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230	0,12	0,25	0,35				260	280			
ALLUMINIO E SUE LEGHE - ALUMINIUM	21-25	60-130											
RAME E SUE LEGHE - COPPER	26-28	90-110											
NON METALLICI - PLASTICS	29-30	/											
LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	31-35	200-320	0,05	0,08	0,12				50				
TITANIO E SUE LEGHE - TITANIUM	36-37	400-1050 <sup>n</sup>	0,05	0,08	0,12				45				
ACCIAIO TEMPRATO - HARDENED STEEL	38-41	45-60 <sup>a</sup>											

$$n = \frac{Vc \cdot 1000}{\phi D \cdot 3,14} = \text{giri/min (min}^{-1}\text{)}$$



$$fz = fz0 \cdot Kae = \text{mm}$$

$$fn = fz \cdot z = \text{mm}$$

$$Vf = fz \cdot z \cdot n = \text{mm/min}$$

ae/D	0,5-1 50-100%	0,2 20%	0,1 10%	0,05 5%	0,02 2%
Kae	1	1,1	1,2	1,3	1,5

ae/D	0,5-1 50-100%	0,2 20%	0,1 10%	0,05 5%
Vc	Vc (min)-----Vc(max)			
Pag. B 254	R-----M-----F			

- F = FINITURA, LAV. LEGGERA - FINISHING, LIGHT MACHINING
- M = LAV. MEDIA, GENERICA - MEDIUM MACHINING, GENERIC
- R = SGROSSATURA, LAV. PESANTE - ROUGHING, HEAVY MACHINING

- Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED
- n = giri/min (min<sup>-1</sup>) NUMERO DI GIRI - NUMBER OF REVOLUTIONS
- fz = mm AVANZAMENTO AL DENTE - TOOTH FEED
- fn = mm AVANZAMENTO AL GIRO - FEED / REVOLUTION
- Vf = mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED
- Kae = FATTORE DI CORREZIONE - CORRECTION FACTOR

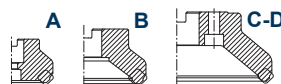
- 8 Taglienti "Utili" disponibili grazie all'inserto bilaterale.
- 8 "Useful" cutting-edges thanks to two-sided insert
- 8 "Nützliche" schneidkanten dank zweiseitiger wendeschneidplatten
- 8 Tranchants "Utiles" disponibles grace a la plaquette bilaterale

**S 8801-8 .. 12**  
**S 8801-8W .. 12**

Ø 50-250

$\gamma_p$  +6°  
 $\gamma_f$  -8°/-5,5°  
 $\gamma_o$  -8°/-5,5°

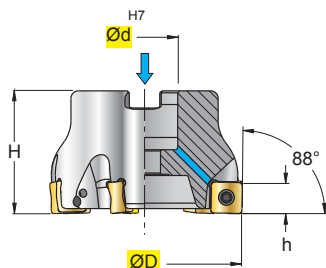
ISO 6462 ...



**SNMX**  
**120612**  
**.F52**

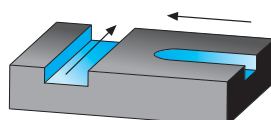


**SNMX**  
**1206QNN**  
**.F52**



INSERTI - INSERTS  
 PAG. B 269

ART.	(mm)					kg	Nm	ISO 6462				
	ØD	Ød	H	h	Z							
S 8801-8W-050-04-12	50	22	40	11,5	4	0,27	3,8+5	A	1206	124011	5620	VBSF10
S 8801-8W-063-06-12	63	22	40	11,5	6	0,46	3,8+5	A				
S 8801-8W-080-07-12	80	27	50	11,5	7	0,94	3,8+5	A	1206	124011	5620	AL12x35
S 8801-8W-080-09-12	80	27	50	11,5	9	0,92	3,8+5	A				
S 8801-8W-100-08-12	100	32	50	11,5	8	1,63	3,8+5	A-B	1206	124011	5620	AL16x35
S 8801-8W-100-11-12	100	32	50	11,5	11	1,59	3,8+5	A-B				
S 8801-8W-125-10-12	125	40	63	11,5	10	3,05	3,8+5	A-B	1206	124011	5620	AL20x45
S 8801-8W-125-14-12	125	40	63	11,5	14	2,99	3,8+5	A-B				
S 8801-8-160-12-12	160	40	63	11,5	12	4,00	3,8+5	C	1206	124011	5620	-
S 8801-8-160-18-12	160	40	63	11,5	18	3,91	3,8+5	C				
S 8801-8-200-14-12	200	60	63	11,5	14	6,61	3,8+5	D				
S 8801-8-200-22-12	200	60	63	11,5	22	6,48	3,8+5	D				
S 8801-8-250-16-12	250	60	63	11,5	16	9,68	3,8+5	D				
S 8801-8-250-24-12	250	60	63	11,5	24	9,52	3,8+5	D				



W = FORO PER LIQUIDO REFRIGERANTE - COOLANT BORE - KÜHLMITTELBOHRUNG - TROU DU LIQUIDE D'ARROSAGE



