



## Power Tools for Neurosurgery

HighSurg 30  
High speed motor system for Neurosurgery





**Intuitive**

**Versatile**

**Reliable**

Nouvag AG has been successfully developing and manufacturing world leading high-tech instruments for more than 50 years. Their high efficiency and reliability have made these instruments to be worldwide highly recommended by surgeons.

The latest breakthrough of Nouvag AG is the new generation of the surgical motor system HighSurg 30. This motor system is primarily used in Neurosurgery with its time saving, efficient Dual Motor Principal. Connect two Micro Motors and attach the desired Handpiece for convenient work!

# Cranial Perforator Handpiece

1200 rpm

The cranial perforator of Nouvag AG is one of perforators with a highest torque on the international market. It delivers a peak torque of 210 Ncm. The solid appearance with its stable mechanics reflects reliability and longevity, Made in Switzerland.

Designed for single use, the single use perforators attachments provide increased safety and eliminate the costs of cleaning and re-processing, as well as re-sharpening. Our single use perforator attachments with automatic locking system are available in 3 diameters and with 2 different drilling depths, each of a 1 mm for pediatric use and 3 mm for adults.



Cranial-Perforator Handpiece,  
REF: 1924nou



## Single use perforators

REF	inner/outer Ø	Skull bone thickness	Adults	Child	Color
1978E	6 mm / 9 mm	1 mm		•	gray
1920E	6 mm / 9 mm	3 mm	•		gray
1977E	7 mm / 11 mm	1 mm		•	purple
1976E	7 mm / 11 mm	3 mm	•		purple
1980E	11 mm / 14 mm	1 mm		•	orange
1922E	11 mm / 14 mm	3 mm	•		orange



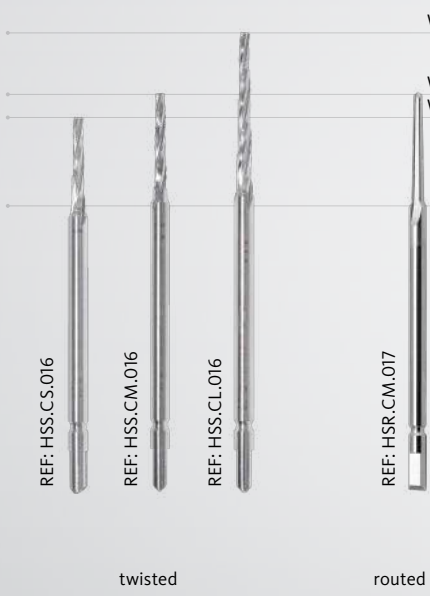
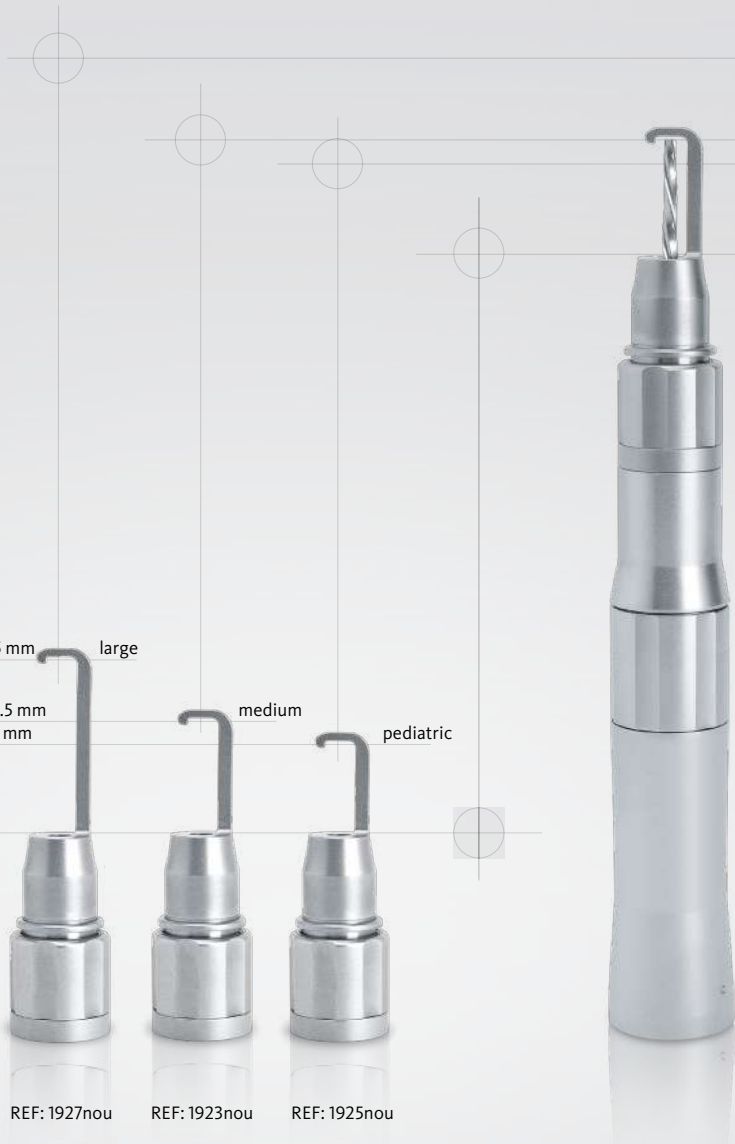
# Craniotome Handpiece

60 000 rpm

After the cranial perforation with the Cranial Perforator, the Craniotome is used. With the clamped milling tool in the Craniotome the burr holes can be connected and the bone plate can be lifted, exposing the Dura for the intended intervention.

The cranial drilling and milling tools are available in 3 sizes and two versions. The Craniotome with attached Duraprotector prevents damage to the dural layer and other parts of the brain during the milling process.

The high-tech Craniotome of Nouvag AG was developed with the highest safety standards and best functionality in mind.

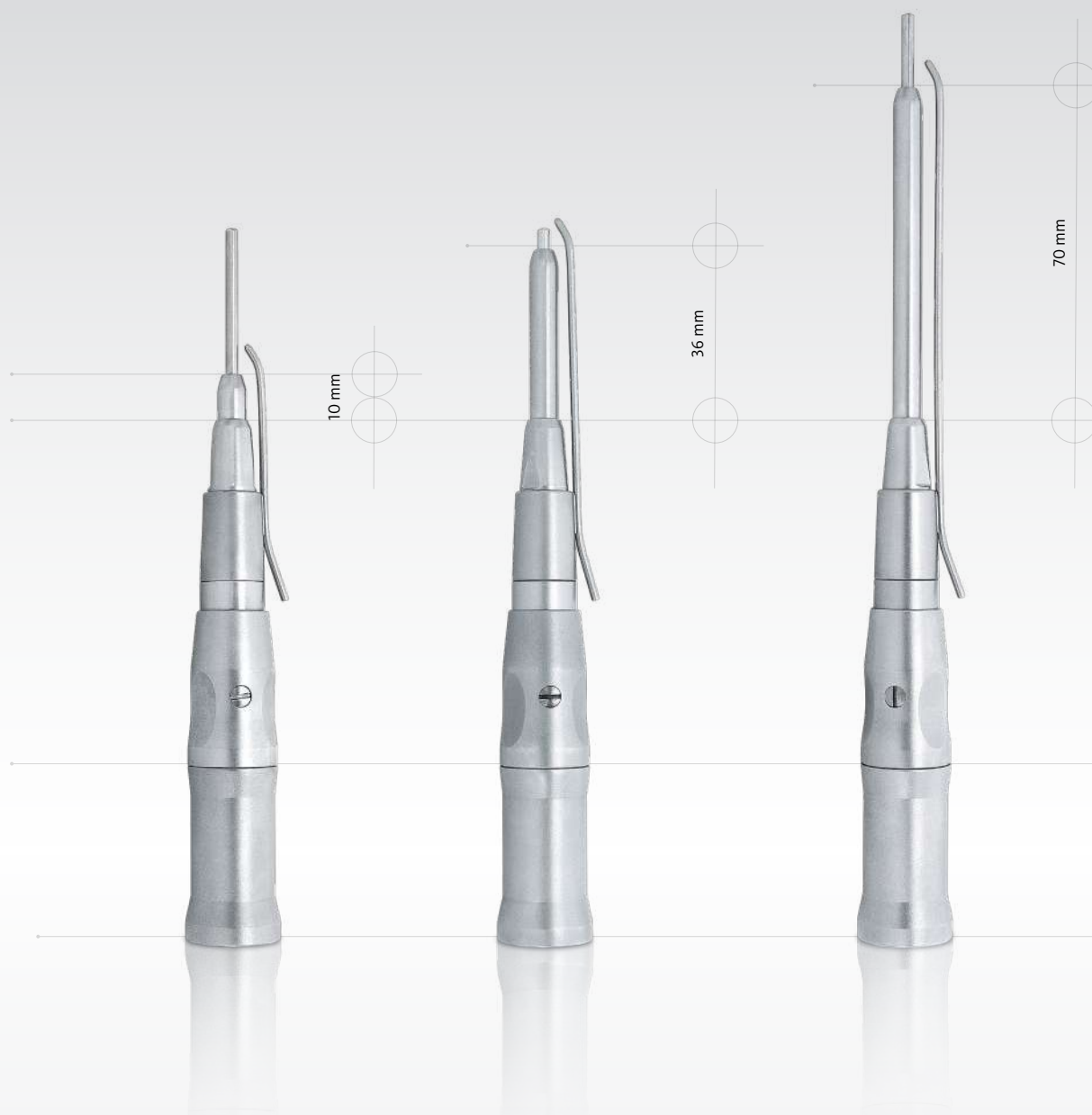


**Craniotome Handpiece with medium Duraprotector, REF: 1926nou\***  
\* exclusive milling tools

# High speed Surgical handpieces

80 000 rpm

The slim high speed Handpieces are available in various lengths in straight and angled versions. The quick coupling handpieces are perfectly balanced with low vibration for a fatigue free working in various types of operations.



**REF: 1903nou**

Weight | 80 g  
Length | 70 mm

**REF: 1904nou**

Weight | 82 g  
Length | 95 mm

**REF: 1905nou**

Weight | 86 g  
Length | 125 mm



**REF: 1908nou**

Weight | 114 g  
Length | 125 mm

**REF: 1907nou**

Weight | 110 g  
Length | 95 mm

**REF: 1906nou**

Weight | 108 g  
Length | 70 mm



# High speed drills for high speed Handpieces

	Head Ø, mm	Number of flutes	Shank length 70 mm REF burr:	Shank length 95 mm REF burr:	Shank length 125 mm REF burr:
Rose burr, Steel	0.8	6	RS.070.008	•	•
	1.0	12	RS.070.010	•	•
	1.4	8	RS.070.014	RS.095.014	RS.125.014
	1.8	8	RS.070.018	RS.095.018	RS.125.018
	2.3	8	RS.070.023	RS.095.023	RS.125.023
	2.7	10	RS.070.027	•	•
	3.1	10	RS.070.031	RS.095.031	RS.125.031
	4.0	12	RS.070.040	RS.095.040	RS.125.040
	5.0	12	RS.070.050	RS.095.050	RS.125.050
	6.0	14	RS.070.060	RS.095.060	RS.125.060
Rose burr, Carbide	0.5	6	RC.070.005	•	•
	0.8	6	RC.070.008	•	•
	1.0	6	RC.070.010	•	•
	1.4	6	RC.070.014	•	•
	1.8	6	RC.070.018	•	•
	2.3	6	RC.070.023	•	•
	2.7	8	RC.070.027	•	•
	3.1	8	RC.070.031	•	•
	3.5	8	RC.070.035	•	•
	4.0	10	RC.070.040	RC.095.040	RC.125.040
	5.0	12	RC.070.050	RC.095.050	RC.125.050
	6.0	14	RC.070.060	•	•
	7.0	16	RC.070.070	•	•









# High speed Diamond Burr

	Head Ø, mm	Shank length 70 mm REF burr:	Shank length 95 mm REF burr:	Shank length 125 mm REF burr:
Diamond ball burr	0.6	DA.070.006	•	•
	0.8	DA.070.008	•	•
	1.0	DA.070.010	DA.095.010	•
	1.4	DA.070.014	DA.095.014	•
	1.8	DA.070.018	•	•
	2.3	DA.070.023	DA.095.023	DA.125.023
	2.7	DA.070.027	•	•
	3.1	DA.070.031	•	DA.125.031
	3.5	DA.070.035	DA.095.035	•
	4.0	DA.070.040	DA.095.040	DA.125.040
	4.5	DA.070.045	•	DA.125.045
	5.0	DA.070.050	DA.095.050	DA.125.050
	6.0	DA.070.060	DA.095.060	DA.125.060
7.0	DA.070.070	•	•	
Diamond ball burr, coarse	2.3	DC.070.023	DC.095.023	DC.125.023
	3.1	DC.070.031	DC.095.031	DC.125.031
	4.0	DC.070.040	DC.095.040	DC.125.040
	5.0	DC.070.050	DC.095.050	DC.125.050
	6.0	DC.070.060	DC.095.060	DC.125.060
Diamond ball burr, extra coarse	3.0	•	DEC.095.030	DEC.125.030
	4.0	•	DEC.095.040	DEC.125.040



		Head Ø, mm	Shank length 70 mm REF burr:	Shank length 95 mm REF burr:	Shank length 125 mm REF burr:
Diamond ball burr, mega coarse		3.0	DMC.070.030	•	•
		4.0	DMC.070.040	•	•
Diamond egg burr,		•	•	•	•
		4.0	DAE.070.040	•	•

## Diverse forms

		Head Ø, mm	Number of flutes	Working length, mm	Shank length 70 mm REF burr:	Shank length 95 mm REF burr:	Shank length 125 mm REF burr:
Cylinder burr with cross-train Carbide		4.0	10	9.0	CB.070.040	•	CB.125.040
		5.0	12	10.0	CB.070.050	•	•
Bud burr with cross-train Carbide		4.0	10	8.0	BB.070.040	BB.095.040	•
		5.0	12	9.5	BB.070.050	•	•
Egg burr Carbide		4.0	10	9.5	•	EB.095.040	EB.125.040
		6.0	14	9.5	•	•	EB.125.060
Pear burr Carbide		6.0	14	10.0	•	PB.095.060	PB.125.060
		•	•	•	•	•	•
Acorn burr (Spine surgery) Carbide		7.5	8	9.3	•	AB.095.075	AB.125.075
		•	•	•	•	•	•
Neuro burr (Spine surgery) Carbide		1.8	2	3.0	•	•	NB.125.018
		3.0	2	4.0	•	•	NB.125.030
Wire pass drill Carbide		1.0	2	10.0	•	WD.095.010	WD.125.010
		1.2	2	10.0	•	WD.095.012	WD.125.012
		1.5	2	6.6	•	•	WD.125.015
Spiral drill, Carbide		1.5	2	20.0	•	SD.095.015	•
		2.0	2	20.0	SD.070.020	SD.095.020	•
		1.5	2	6.0	SD.070.015	•	•
		1.5	2	8.0	SDD.070.015	•	•

80 000 rpm

STERILE

# Endoscopic spine Surgery

## 1:1 handpiece



Our 1:1 handpiece, for spine surgery, in combination with the HighSurg 30 surgical motor system, forms the basis for driving our entire range of different rotary spinal milling cutters.

# Rotary spinal milling cutters and associated support sleeves

Illustration	REF	Description	Head-Ø	Support sleeve, inner -Ø 	Working length	Support sleeve, outer-Ø 	Parts/PU
	1918nou	Support sleeve, open	-	3.2 mm	185 mm	4.0 mm	1
	1750nou	Diamond milling cutter, round	5.0 mm	-	185 mm	-	3
	1751nou	Carbide milling cutter, round	5.0 mm	-	185 mm	-	3
	1752nou	Carbide milling cutter, conical	5.0 mm	-	185 mm	-	3
	1753nou	Support sleeve, open	-	3.0 mm	230 mm	3.5 mm	1
	1762nou	Carbide milling cutter, round	3.0 mm	-	230 mm	-	3
	1763nou	Diamond milling cutter, round	3.0 mm	-	230 mm	-	3
	1764nou	Diamond milling cutter, round	3.7 mm	-	230 mm	-	3
	1765nou	Carbide milling cutter, round	3.5 mm	-	230 mm	-	3
	1748nou	Support sleeve, open	-	3.2 mm	230 mm	4.0 mm	1
	1749nou	Support sleeve with distal protection	-	3.2 mm	230 mm	4.0 mm	1
	1745nou	Carbide milling cutter, round	3.0 mm	-	230 mm	-	3
	1746nou	Diamond milling cutter, round	3.0 mm	-	230 mm	-	3
	1766nou	Carbide milling cutter, round	3.5 mm	-	230 mm	-	3
	1747nou	Diamond milling cutter, round	3.7 mm	-	230 mm	-	3
	1916nou	Support sleeve, open	-	3.0 mm	315 mm	3.5 mm	1
	1755nou	Carbide milling cutter, round	3.0 mm	-	315 mm	-	3
	1756nou	Diamond milling cutter, round	3.0 mm	-	315 mm	-	3
	1759nou	Carbide milling cutter, round	3.5 mm	-	315 mm	-	3
	1757nou	Diamond milling cutter, round	3.7 mm	-	315 mm	-	3
	1914nou	Support sleeve, open	-	3.2 mm	315 mm	4.0 mm	1
	1915nou	Support sleeve with distal protection	-	3.2 mm	315 mm	4.0 mm	1
	1737nou	Support sleeve with beveled protection	-	3.2 mm	315 mm	4.0 mm	1
	1911nou	Carbide milling cutter, round	3.0 mm	-	315 mm	-	3
	1912nou	Diamond milling cutter, round	3.0 mm	-	315 mm	-	3
	1738nou	Carbide milling cutter, round	3.5 mm	-	315 mm	-	3
	1913nou	Diamond milling cutter, round	3.7 mm	-	315 mm	-	3
	1784nou	Carbide milling cutter, round	4.0 mm	-	315 mm	-	3

# High torque electronic motor 21

Robust and powerful electronic motor with high torque for driving the cranial perforator. The anti-twist device ensures that the attached handpiece cannot twist during use. When used with high torques, the built-in ventilation dissipates the heat.



50 000 rpm

REF 2099nou: High torque Electronic motor 21  
with twist protection lock, up to 50 000 rpm

# High speed electronic motor 21

80 000 rpm

**REF 2098nou:** Electronic motor 21 with twist protection lock, good for up to 80,000 rpm



Variant of the electronic motor 21 for speeds of up to 80,000 revolutions per minute. Our 1 : 1 handpieces can be driven very efficiently in connection with a clamped diamond or hard metal milling cutter. This motor also contains the anti-rotation device to hold the handpiece in a fixed position.

## Accessories



**REF 1898:** Vexio Cart, Modern trolley with two shelves and lockable anti-static rollers and integrated cable channel to the power supply with 3 power sockets. (**REF 1894:** Bottle holder is optional)

**REF 6024:** Tubing set for the peristaltic pump of HighSurg 11 and HighSurg 30





# Maintenance and care



REF 19584: Sprayadapter for the maintenance and care of the electronic motor 21



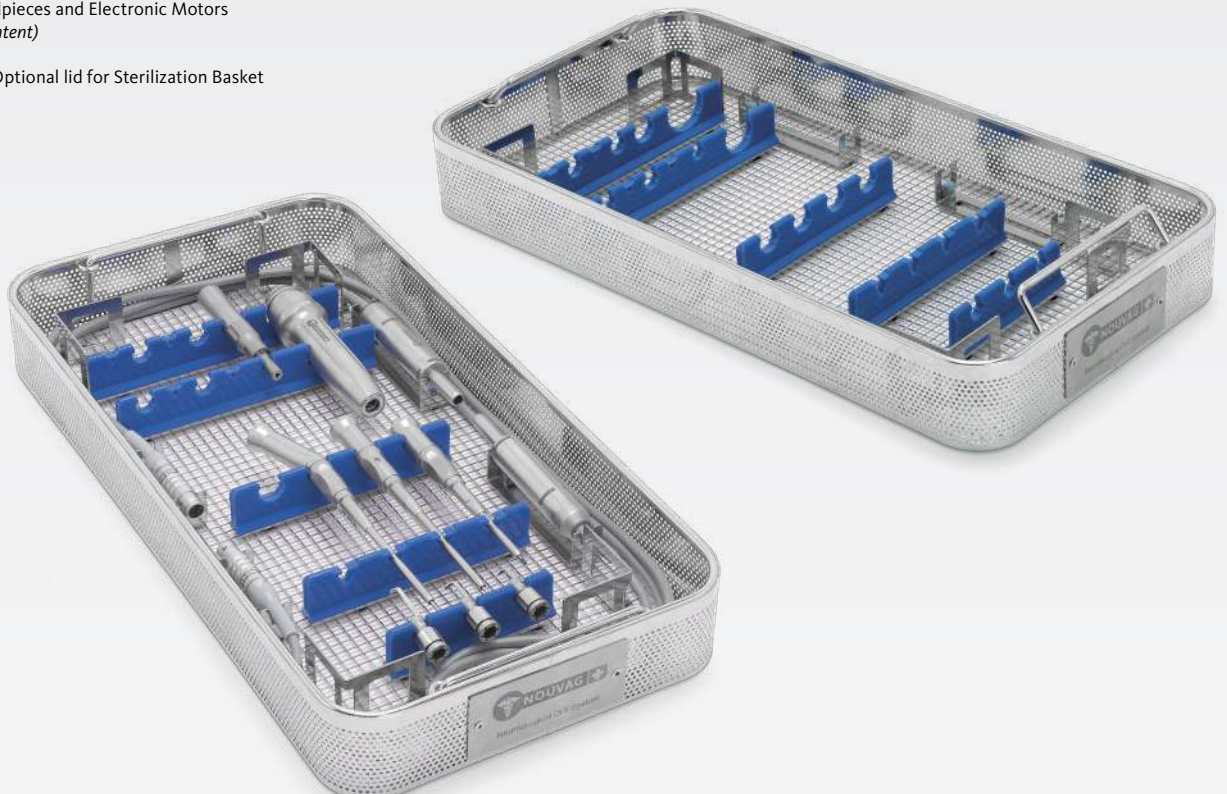
REF 2128: NouvaOil maintenance and care spray, used after the reprocessing procedure



REF 2127: NouvaClean-Spray for pre-cleaning in the reprocessing procedure

REF 4132: Sterilization Basket with fixation for the sterilization of Craniotomes, Cranial Perforators, High speed Handpieces and Electronic Motors (without content)

REF 4134: Optional lid for Sterilization Basket





## Technical data

### HIGH SURG 30 Highspeed: REF 3365

Voltage	variable: 100 V~/ 115 V~/ 230 V~, 50–60 Hz
Power consumption	120 VA
Applied parts	Type BF
Max. torque	6 Ncm
Dimensions (W x D x H)	260 x 250 x 110 mm
Weight	3.7 kg
Pedal IP code	IPX8

### Cranial Perforator: REF 1924nou

Speed range	80 – 1200 rpm
Max. torque	210 Ncm
Coupling motor side	ISO 3964
Coupling to instrument	Hudson

### Craniotome: REF 1926nou

Speed range	1000 – 60 000 rpm
Coupling motor side	ISO 3964

### Electronic motor 21: REF 2098nou

Power consumption	120 VA
Max. speed	80 000 rpm
Coupling	ISO 3964
Weight	115 g, without cable
Cable length	3 m

### Electronic motor 21: REF 2099nou

Max. Speed	50 000 rpm
Max. Torque	6 Ncm
Coupling	ISO 3964
Weight	115 g, without cable
Cable length	3 m

### High speed Surgical Handpieces: REF 1903nou - 1908nou

Transmission	1 : 1
Max. speed	80 000 rpm
Coupling motor side	ISO 3964

Brochures may represent products that are not available in all markets.



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