

## Rototec-Spintec products - NMR Pricelist Version 26.07.2018

• All prices are in EURO excluding sales tax valid from 1st May, 2017

### Payment Terms are:

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**Rototec-Spintec GmbH Terms & Conditions of Sale (German):**  
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### Solids NMR Zirconia MAS Rotors & Caps

#### 2.5mm Rotors & Caps for Bruker MAS Probes | Product Group B

Article Number	Quantity/Unit Each	Price	Description
WP-501-2180	1	450,00	Zirconia MAS Rotor; 2.5mm OD, 1.3mm ID, V max 35kHz
	5	440,00	
	10+	430,00	
WP-501-2181 <b>NEW!</b>	1	450,00	Zirconia MAS Rotor; 2.5mm OD, 1.5mm ID, V max 35kHz
	5	440,00	
	10+	430,00	
WP-602-2181	1	110,00	Vespel SP1 Caps (VT), 2.5mm OD, 1.3mm ID, V max 35kHz V max
	10+	105,00	
WP-602-2183 <b>NEW!</b>	1	150,00	Vespel SP1 Caps (VT), 2.5mm OD, 1.5mm ID, V max 35kHz V max
	10+	145,00	
WP-602-2185 <b>NEW!</b>	1	200,00	Vespel SP1 Caps (VT), 2.5mm OD, 1.7mm ID, V max 35kHz V max
	10+	195,00	
WP-602-2182	1	90,00	Vespel SP1 Bottom Plugs (VT), 2.5mm OD, 1.3mm ID, V max 35kHz V max
	10+	85,00	
WP-602-2184 <b>NEW!</b>	1	110,00	Vespel SP1 Bottom Plugs (VT), 2.5mm OD, 1.5mm ID, V max 35kHz V max
	10+	105,00	
WP-602-2186 <b>NEW!</b>	1	135,00	Vespel SP1 Bottom Plugs (VT), 2.5mm OD, 1.7mm ID, V max 35kHz V max
	10+	130,00	
WP-603-2181	1	95,00	Kel-F Caps (For red. 1H Background, RT, 2.5mm OD, 1.3mm ID Rotors) 20-25 kHz Vmax
	10+	90,00	
WP-603-2182	1	90,00	Kel-F Bott. Plugs (For red. 1H Backgrnd, RT 2.5mm OD, 1.3mm ID Rotors)
	10+	85,00	
RS-201-2180	1	33,00	Manual Rotor Packer, 2.5mm, Product Group A
RS-301-2180	1	825,00	2.5mm Rotor Cap Remover for all Rotor ID, i.e. 1.3,1.5,1.7mm, Product Group A
RS-401-2180	1	24,00	2.5mm Filling funnel, Product Group A
WP-501-2180-Set1	1	790,00	1x 2.5mm OD / 1.3mm ID Rotor, 2x Vespel Caps, 2x Vespel Bottom Plugs
WP-501-2180-Set2	1	1.490,00	2x 2.5mm OD / 1.3mm ID Rotors, 4x Vespel Caps, 4x Vespel Bottom Plugs
WP-501-2180-Set3	1	3.700,00	5x 2.5mm OD / 1.3mm ID Rotors, 10x Vespel Caps, 10x Vespel Bottom Plugs

#### 3.2mm Rotors & Caps for Bruker MAS Probes | Product Group B

Article Number	Quantity/Unit Each	Price	Description
<i>Technical note: Our 3.2mm Rotor for Bruker MAS probes is as our 2.5 / 4mm HR Design, i.e. using a removable bottom plug of the same material as the Rotor cap for easier Rotor cleaning.</i>			
WP-501-3180	1	410,00	Zirconia MAAS Rotor; V max 24 kHz
	5	405,00	
	10+	400,00	
WP-602-3181	1	105,00	Vespel SP1 Caps (VT) 24 kHz - V max
	10+	100,00	
WP-602-3182	1	95,00	Vespel SP1 Bottom plugs (VT) 24 kHz - V max
	10+	90,00	
WP-603-3181	1	95,00	Kel-F Caps (For reduced 1H Background, RT) 10-15 kHz - V max
	10+	90,00	
WP-603-3182	1	90,00	Kel-F Bottom Plugs (For reduced 1 H Background,RT) 10-15 kHz V max
	10+	85,00	
RS-201-3180	1	31,00	Manual Rotor Packer, 3.2mm, Product Group A
RS-301-3180	1	825,00	3.2mm Rotor Cap Remover, Product Group A
RS-401-3180	1	24,00	3.2mm Filling funnel, Product Group A
WP-501-3180-Set1	1	790,00	1x 3.2mm Rotor, 2x Vespel Caps, 2x Vespel Bottom Plugs
WP-501-3180-Set2	1	1.490,00	2x 3.2mm Rotors, 4x Vespel Caps, 4x Vespel Bottom Plugs
WP-501-3180-Set3	1	3.600,00	5x 3.2mm Rotors, 10x Vespel Caps, 10x Vespel Bottom Plugs
(Sets with Kel-f Caps & Plugs available on request)			



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4mm Rotors & Caps for Bruker MAS Probes | Product Group B

Article Number	Quantity/Unit Each	Price	Description
WP-501-4180	1	300,00	Zirconia MAS Rotor; V max 18kHz, for complete rotor sets see end of section 7.07µl / mm, 14mm, total volume 99µl
	5	290,00	
	10+	280,00	
WP-501-4181	1	320,00	Zirconia MAS Rotor; V max 18kHz; laser marked with a unique number and permanent tachometer mark on the base, 7.07µl / mm, 14mm, total volume 99µl
	5	310,00	
	10+	300,00	
WP-501-4183	1	320,00	Zirconia HR MAS Rotor; V max 12kHz, now superceded by WP-501-4185 or -4187 (Gels only, special Tight Fit caps required for pure liquids > 3kHz)
	5	310,00	
	10+	300,00	
WP-501-4185	1	400,00	4mm HR MAS Rotor reduced volume, Zirconia, V max 18kHz, fixed base, 3mm ID, 15µl, Tachometer laser-marked, Rotor only. Add Plug, JK-601-4183-15 or -TF version
WP-501-4187	1	400,00	4mm HR MAS Rotor reduced volume, Zirconia, V max 18kHz, fixed base, 3mm ID, 50µl, Tachometer laser-marked, Rotor only. Add Plug, JK-601-4183-50 or -TF version
WP-601-4181	1	48,00	Kel-F Caps
	10+	45,00	
JK-601-4181	1	65,00	Kel-F Caps with 1 O-Ring
	10+	60,00	
JK-601-4181-S	1	70,00	Kel-F Cap Special Press Tight Fit
	10+	65,00	
JK-601-4183-15	1	105,00	Caps, 4mm, Kel-F, HR, 15µL for Room Temperature, with 2 O-rings for WP-501-4183 (Gels or Pure Liquids up to 3kHz)
	10+	100,00	
JK-601-4183-15TF	1	105,00	Caps, 4mm with vent plug - Kel-F, 15µl, 1 x O-Ring, RT for HR Rotor WP-501-4183 Tight Fit
	10+	100,00	
JK-601-4183P-15	1	50,00	Bottom Plugs, 4mm, Kel-F, HR, 15µL for Room Temperature, with 2 O-rings for WP-501-4183 (Gels or Pure Liquids up to 3kHz)
	10+	45,00	
JK-601-4183P-15TF	1	50,00	Bottom Plugs, 4mm, Kel-F, 50µl, 1 x O-Ring RT Special Press Fit for HR Rotor WP-501-4183TF
	10+	45,00	
JK-601-4183-50	1	105,00	Caps, 4mm, Kel-F, HR, 50µL for Room Temperature, with 2 O-rings for WP-501-4183 (Gels or Pure Liquids up to 3kHz)
	10+	100,00	
JK-601-4183-50TF	1	105,00	Caps, 4mm with vent Plug - Kel-F, 50µl 1 x O-Ring, RT Special Tight Fit for HR Rotor WP-501-4183 or -4185 or -4187
	10+	100,00	
JK-601-4183P-50	1	50,00	Bottom Plugs, 4mm, Kel-F, HR, 50µL for Room Temperature, with 2 O-rings for WP-501-4183 (Gels or Pure Liquids up to 3kHz)
	10+	45,00	
JK-601-4183P-50TF	1	50,00	Bottom Plugs, 4mm, Kel-F, 50µl, 1xO-Ring RT Special Tight Fit for HR Rotor WP-501-4183
	10+	45,00	
JK-601-4183D-50	1	45,00	1 x 3mm Kel-F Sample Shimming Discs for 4mm 50µL HR Rotors
JK-601-4184	1	45,00	Tool for 4mm HR Rotors
JK-601-4184TF	1	70,00	Tool for 4mm HR Rotor Caps, Tight Fit
JK-601-4185	1	25,00	Replacement plug for either JK-601-4183-15 or -50
RS-201-4180	1	21,00	Manual MAS Rotor Packer, 4.0mm, Product Group C
RS-301-4180	1	825,00	4.0mm Rotor Cap Remover, Product Group C
RS-401-4180	1	58,00	4.0mm Filling Funnel, Product Group C
JK-602-4181	1	135,00	Macor Caps with 1 O-Ring, V max 10kHz
	10+	130,00	
JK-603-4181	1	70,00	Torlon Caps with 1 O-Ring
	10+	65,00	
JK-604-4181	1	80,00	Vespel Caps with 1 O-Ring
	10+	75,00	
JK-602-4181-O	1	2,00	Viton O-Rings for Macor Caps
	10+	1,50	
JK-603-4181-O	1	2,00	Viton O-Rings for Caps excepting Macor
	10+	1,50	
WP-501-4183-Set 15	1	460,00	Rotor, 4mm Zirconia for HR, Cap and Bottom, Kel-F, 15µL
	10+	450,00	
WP-501-4183-Set 50	1	460,00	Rotor, 4mm Zirconia for HR, Cap and Bottom, Kel-F, 50µL
	10+	450,00	
WP-501-4183-Set 15TF	1	460,00	1x Rotor, 1x HR Kel-F Cap, 1x HR Kel-F Plug, 15µl, Special Tight Fit
	10+	450,00	
WP-501-4183-Set 50TF	1	460,00	1x Rotor, 1x HR Kel-F Cap, 1x HR Kel-F Plug, 50µl, Special Tight Fit
	10+	450,00	
WP-501-4180-Set 1	1	440,00	1x 4mm Rotor, 2x Kel-F Caps, 1x Torlon Cap
WP-501-4180-Set 2	1	850,00	2x 4mm Rotors, 4x Kel-F Caps, 1x Torlon Cap
WP-501-4180-Set 5	1	2.100,00	5x 4mm Rotors, 10x Kel-F Caps, 3x Torlon Caps (Laser Marked Sets on request)



**7mm Rotors & Caps for Bruker MAS Probes | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
WP-501-7180	1	250,00	Zirconia MAS Rotor; max speed 7kHz, for complete rotor sets see end of section.
	5	245,00	
	10+	240,00	
WP-601-7180	1	28,00	Kel-F Caps for DB 
	10+	20,00	
WP-601-7181	1	48,00	Kel-F Caps for BL 
	10+	45,00	
JK-601-7180	1	55,00	Kel-F Caps for DB with 1 O-Ring (10 pieces min. Order Quantity)
JK-601-7181	1	60,00	Kel-F Caps for BL with 1 O-Ring
JK-601-7181-L	5	55,00	Kel-F Caps for BL with 2 O-Rings, long shaft
	1	60,00	
JK-601-7181-WH	1	85,00	Kel-F Caps for BL, 1 O-Ring, Axial hole, (10 pieces min. Order Quantity)
JK-601-7181-LWH	1	85,00	Kel-F Caps for BL, 2 O-Rings, Axial hole, (10 pieces min. Order Quantity)
JK-602-7180	1	105,00	Macor Caps for DB, with 1 O-Ring (10 pieces min. Order Quantity)
JK-602-7180-L	1	110,00	Macor Caps for DB with 2 O-Rings; long (10 pieces min. Order Quantity)
JK-602-7181	1	110,00	Macor Caps for BL with 1 O-Ring
	5	100,00	
JK-602-7181-L	1	120,00	Macor Caps for BL with 2 O-Rings, long shaft
	5	110,00	
JK-603-7180	1	65,00	Torlon Caps for DB with 1 O-Ring (10 pieces min. Order Quantity)
JK-603-7180-L	1	60,00	Torlon Caps for DB with 2 O-Rings; long (10 pieces min. Order Quantity)
JK-603-7181	1	70,00	Torlon Caps for BL with 1 O-Ring
	5	65,00	
JK-603-7181-WH	1	80,00	Torlon Caps for BL, 1 O-Ring, Axial hole, (10 pieces min. Order Quantity)
JK-603-7181-L	1	65,00	Torlon Caps for BL with 2 O-Rings, long shaft
	5	60,00	
JK-603-7181-LWH	1	90,00	Torlon Caps for BL, 2 O-Rings, Axial hole, (10 pieces min. Order Quantity)
JK-601-7180-O	1	2,00	Viton O-Rings
	10+	1,50	
WP-501-7180-Set 1	1	360,00	1x 7mm Rotor, 2x Kel-F Cap, 1x Torlon Cap (BL)
WP-501-7180-Set 2	1	700,00	2x 7mm Rotors, 4x Kel-F Cap, 2x Torlon Caps (BL)
WP-501-7180-Set 5	1	1.700,00	5x 7mm Rotors, 10x Kel-F Caps, 5x Torlon Caps (BL)

**4mm Rotors & Caps for Varian MAS Probes (Jakobsen style) | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
WP-501-4224	1	800,00	Silicon Nitride (Si <sub>3</sub> N <sub>4</sub> ) MAS Rotor; max. speed 18kHz
	5	790,00	
	10+	780,00	
JK-601-4224	1	170,00	Kel-F Caps with 2 O-Rings
	5+	160,00	
JK-603-4224	1	170,00	Torlon Caps with 2 O-Rings
	5+	160,00	
JK-603-4224-WH	1	180,00	Torlon Caps with 2 O-Rings and an axial hole for venting, 5 minimum order
JK-603-4224-O	1	2,00	Viton O-Rings

**5mm Rotors & Caps for Varian MAS Probes (Jakobsen style) | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
WP-501-5225	1	410,00	Zirconia MAS Rotor; max. speed 13kHz
	5	405,00	
	10+	400,00	
JK-601-5225	1	170,00	Kel-F Caps with 2 O-Rings
	5+	160,00	
JK-603-5225	1	170,00	Torlon Caps with 2 O-Rings
	5+	160,00	
JK-603-5225-WH	1	190,00	Torlon Caps with 2 O-Rings and an axial hole for venting, 5 minimum order
JK-603-5225-O	1	2,00	Viton O-Rings

**7mm Rotors & Caps for Varian MAS Probes (Jakobsen style) | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
WP-501-7225	1	410,00	Zirconia MAS Rotor; max speed 7kHz
	5	405,00	
	10+	400,00	
JK-601-7225	1	170,00	Kel-F Caps with 2 O-Rings
	5	160,00	
JK-603-7225	1	170,00	Torlon Caps with 2 O-Rings
	5	160,00	
JK-603-7225-WH	1	180,00	Torlon Caps with 2 O-Rings and an axial hole for venting, 5 minimum order
JK-603-7225-O	1	2,00	O-Ring for 7mm Caps, Viton O-Rings

**High Resolution Rotors for the Varian Nano Probes (excluding gHx) | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
WP-502-4225/C	1	120,00	Pyrex with bottom
WP-502-4225/O	1	120,00	Pyrex without bottom
WP-502-4226 <b>NEW!</b>	1	340,00	Zirconia without bottom
WP-7021-4225/110	1	210,00	Pyrex with bottom and Kel-F Cap 110µL
WP-7021-4225/40	1	230,00	Pyrex with Kel-F Cap and Bottom Plug 40µL
WP-7021-4225/60	1	230,00	Pyrex with Kel-F Cap and Bottom Plug 60µL
WP-7021-4226/40 <b>NEW!</b>	1	430,00	Zirconia with Kel-F Cap and Bottom Plug 40µL
WP-7021-4226/60 <b>NEW!</b>	1	430,00	Zirconia with Kel-F Cap and Bottom Plug 60µL
WP-7024-4225/110	1	200,00	Pyrex with bottom and Ertalyte Cap 110µL
WP-7024-4225/40	1	230,00	Pyrex with Ertalyte Cap and Bottom Plug 40µL
WP-7024-4225/60	1	230,00	Pyrex with Ertalyte Cap and Bottom Plug 60µL
JK-601-4225FT	1	25,00	Cap Tool



**High Resolution Rotors for the Varian Nano Probes (excluding gHx) | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
JK-601-4225/40	1	80,00	Kel-F Cap 40µL
JK-601-4225	1	80,00	Kel-F Cap 60µL and 110µL
JK-601-4225P/40	1	45,00	Bottom Plug Kel-F 40µL
JK-601-4225P/60	1	45,00	Bottom Plug Kel-F 60µL
JK-604-4225/40	1	70,00	Cap Ertalyte (PET) 40µL
JK-604-4225	1	70,00	Ertalyte (PET) Cap 60µL and 110µL
JK-604-4225P/40	1	25,00	Bottom Plug Ertalyte 40µL
JK-604-4225P/60	1	25,00	Bottom Plug Ertalyte 60µL

**High Resolution Rotors for the Varian gHx Nano Probes | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
WP-502-4225/C	1	120,00	Pyrex with bottom
WP-502-4225/O	1	120,00	Pyrex without bottom
WP-502-4226 <b>NEW!</b>	1	340,00	Zirconia without bottom
WP-7021-4225F/110	1	270,00	Pyrex with bottom and Kel-F Cap 110µL
WP-7021-4225F/40	1	300,00	Pyrex with Kel-Cap and Bottom Plug 40µL
WP-7021-4225F/60	1	300,00	Pyrex with Kel-Cap and Bottom Plug 60µL
WP-7021-4226F/40 <b>NEW!</b>	1	430,00	Zirconia with Kel-Cap and Bottom Plug 40µL
WP-7021-4226F/60 <b>NEW!</b>	1	430,00	Zirconia with Kel-Cap and Bottom Plug 60µL



**High Resolution Rotors for the Varian gHx Nano Probes | Product Group B**

Article Number	Quantity/Unit Each	Price	Description
JK-601-4225F/40	1	170,00	Kel-F Cap 40µL
JK-601-4225F	1	170,00	Kel-F Cap 60µL and 110µL
JK-601-4225FP/40	1	40,00	Bottom Plug Kel-F 40µL
JK-601-4225FP/60	1	40,00	Bottom Plug Kel-F 60µL

### Spinner Turbines & Accessories

#### Spinner Turbines for Bruker NMR Systems | Product Group A



Article Number	Quantity/Unit Each	Price	Description
B-PEEK-10	1	210,00	10mm Spinner Turbine for Bruker Systems, VT; (-150 °C to +200 °C), ca. 13 g
	5+	205,00	
	10+	200,00	
STB-10	1	95,00	10mm Spinner Turbine for Bruker Systems, RT; New Design ca. 13g
	5+	93,00	
	10+	90,00	
	30+	87,00	
STB-3 <b>NEW!</b>	1	130,00	3mm Spinner Turbine for Bruker Systems, RT; new 4 O ring Design, ca. 15 g
	5+	125,00	
	10+	120,00	
	30+	115,00	
STB-5	1	95,00	5mm Spinner Turbine for Bruker Systems, RT; new 4 O ring Design, ca. 13 g
	5+	93,00	
	10+	90,00	
	30+	87,00	
STB-5-Colour <b>NEW!</b>	1	110,00	5mm Spinner Turbine for Bruker Systems, RT; new 4 O ring Design, ca. 13 g, white top finger for faster dirt recognition; Avail. colours besides the stand. White: Black, Red, Yellow, Green & Blue
	5+	105,00	
	10+	100,00	
	30+	95,00	
B-KEL-F-3 <b>NEW!</b>	1	290,00	3mm Spinner Turbine Kel-F for Bruker Systems, Limited VT (-20 °C to +120 °C); new 4 O ring design, ca. 13g
	10	280,00	
B-PEEK-3 <b>NEW!</b>	1	220,00	3mm Spinner Turbine PEEK for Bruker Systems, VT (-150 °C to +200 °C); new 4 O ring design, ca. 13g (Does not break as quickly as a Ceramic Spinner when dropped!)
	5+	215,00	
	10+	210,00	
B-PEEK-5	1	220,00	5mm Spinner Turbine PEEK for Bruker Systems, VT (-150 °C to +200 °C); new 4 O ring design, ca. 13g (Does not break as quickly as a Ceramic Spinner when dropped!)
	5+	215,00	
	10+	210,00	
B-PEEK-3-NS	1	240,00	3mm Spinner Turbine PEEK for Bruker Systems, VT (-150 °C to +200 °C); with exchangeable PEEK Fingers, 3mm; ca. 13g
	5+	235,00	
	10+	230,00	
B-PEEK-5-NS	1	240,00	5mm Spinner Turbine PEEK for Bruker Systems, VT (-150 °C to +200 °C); with exchangeable PEEK Fingers, 5mm; ca. 13g
	5+	235,00	
	10+	230,00	

#### Spinner Turbines for Varian NMR Systems | Product Group A

Article Number	Quantity/Unit Each	Price	Description
V-GFK-10 / O	1	190,00	10mm Spinner Turbine for Agilent (Varian) Systems, Original, VT (-150 °C to + 200 °C )
	10+	180,00	
V-PEEK-10 <b>NEW!</b>	1	200,00	10mm Spinner Turbine for Agilent (Varian) Systems, PEEK, VT (-150 °C to + 200 °C )
	10+	190,00	
V-PEEK-8 <b>NEW!</b>	1	200,00	8mm Spinner Turbine for Agilent (Varian) Systems, PEEK, VT (-150 °C to + 200 °C )
	10+	190,00	
STV-10 <b>NEW!</b>	1	150,00	8mm Spinner Turbine for Agilent (Varian) Systems, RT
	10+	140,00	
STV-8 <b>NEW!</b>	1	150,00	8mm Spinner Turbine for Agilent (Varian) Systems, RT
	10+	140,00	
STV-5	1	150,00	5mm Spinner Turbine for Varian Systems, RT
	5+	145,00	
	10+	140,00	
	30+	135,00	
V-PEEK-5	1	210,00	5mm Spinner Turbine PEEK for Varian Systems, VT (-150 °C to + 200 °C )
	5+	205,00	
	10+	200,00	
STV-3-NS	1	180,00	3mm Spinner Turbine POM for Varian Systems, RT with exchangeable Finger, 3mm plus Mass Multiplier Ring
	5+	175,00	
	10+	170,00	
STV-5-NS	1	180,00	5mm Spinner Turbine POM for Varian Systems, RT with exchangeable Finger, 5mm plus Mass Multiplier Ring
	5+	175,00	
	10+	170,00	
V-PEEK-3-NS	1	230,00	3mm Spinner Turbine PEEK for Varian Systems, -150°C + 200 °C with exchangeable PEEK Fingers, 3mm plus Mass Multiplier Ring
	5+	225,00	
	10+	220,00	
V-PEEK-5-NS	1	230,00	5mm Spinner Turbine PEEK for Varian Systems, -150°C + 200 °C with exchangeable PEEK Fingers, 5mm plus Mass Multiplier Ring
	5+	225,00	
	10+	220,00	

**Accessories for all Spinner Turbines | Product Group A**

Article Number	Quantity/Unit Each	Price	Description
UNI-FINGER-POM-3	1	30,00	3mm POM Finger for B-PEEK-X-NS / V-PEEK-X-NS with 2 O-Rings, RT
	10+	25,00	
UNI-FINGER-POM-4	1	30,00	4mm POM Finger for B-PEEK-X-NS / V-PEEK-X-NS with 2 O-Rings, RT
	10+	25,00	
UNI-FINGER-POM-5	1	30,00	5mm POM Finger for B-PEEK-X-NS / V-PEEK-X-NS with 2 O-Rings, RT
	10+	25,00	
UNI-FINGER-PEEK-3	1	35,00	3mm PEEK Finger for B-PEEK-X-NS / V-PEEK-X-NS with 2 O-Rings, VT
	10+	30,00	
UNI-FINGER-PEEK-4	1	35,00	4mm PEEK Finger for B-PEEK-X-NS / V-PEEK-X-NS with 2 O-Rings,VT
	10+	30,00	
UNI-FINGER-PEEK-5	1	35,00	5mm PEEK Finger for B-PEEK-X-NS / V-PEEK-X-NS with 2 O-Rings, VT
	10+	30,00	
UNI-MASSMULTI	1	40,00	Mass Multiplier Ring PEEK for all 5mm Bruker or Varian -NS Style Spinner Turbines with one or two O-Rings on the top; ca. 10g
	10+	35,00	
UNI-MM-10	1	15,00	Mass Multiplier Ring for all 10 mm Bruker Spinner Turbines with one large external O-Ring on the top; ca. 10g
	10+	13,00	
STB-5-O-RING	1	1,50	O-Ring for STB-5 / STV3-NS / STV5-NS (black, RT)
	10+	1,30	
O-RING-8-3-RED	1	2,20	O-Ring for B-PEEK-5 / UNI-FINGER (Red, VT)
	10+	2,00	
STB-10-O-RING	1	1,50	O-Ring for STB-10 (Black, RT) -50°→+130° C
	10+	1,30	
B-PEEK-10-O/RING	1	2,20	O-Ring for B-PEEK-10 (Red, VT)
	10+	2,00	
STV-5-O-RING	1	2,20	O-Ring for STV-5 / V-PEEK-5 / GFK-5 (Red, VT) -55°→+200° C
	10+	2,00	
STB-5-TACHO	1	2,00	Tacho-Strips for STB-5
	10+	1,80	
STV-5-TACHO	1	2,00	Tacho-Strips for STV-5
	10+	1,80	
B-PEEK-TACHO	1	2,00	Tacho-Strips for B-PEEK
	10+	1,80	

**Inserts for Spinner Turbines | Product Group A**

Article Number	Quantity/Unit Each	Price	Description
WP-INS-1.7	1	75,00	Insert for Spinner Turbines for 1,7mm Capillaries
	5+	70,00	
WP-INS-2.0	1	75,00	Insert for Spinner Turbines for 2,0mm Capillaries
	5+	70,00	
WP-INS-2.5	1	75,00	Insert for Spinner Turbines for 2,5mm Capillaries
	5+	70,00	
WP-INS-3.0	1	75,00	Insert for Spinner Turbines for 3,0mm Capillaries
	5+	70,00	

**Complete Kit for small sample investigation | Product Group A**

Article Number	Quantity/Unit Each	Price	Description
<b>B-GFK-Kit / V-GFK-Kit</b>	<b>1</b>	<b>750,00</b>	<b>Complete Kit including the following items</b>
B-PEEK-10 / V-GFK-10	1		10mm Spinner Turbine VT, either for Bruker or Varian NMR Systems
WP-INS-1.7	1		Insert for Spinner Turbine for 1,7mm Capillaries
WP-INS-2.0	1		Insert for Spinner Turbine for 2,0mm Capillaries
WP-INS-2.5	1		Insert for Spinner Turbine for 2,5mm Capillaries
WP-INS-3.0	1		Insert for Spinner Turbine for 3,0mm Capillaries
WG-1364-1.7-125	1		1.7mm OD Pyrex NMR Capillaries 125mm, pack of 10
WG-1364-2.0-125	1		2.0mm OD Pyrex NMR Capillaries 125mm, pack of 10
WG-1364-2.5-125	1		2.5mm OD Pyrex NMR Capillaries 125mm, pack of 10
305-PS-125	2		3mm OD Pyrex NMR Tubes 125mm long
513-3-PP-OB	2		10mm Pyrex NMR Tube (open both ends)
DC-501	1		Single-use Syringe 1ml, Pack of 10
DC-502	1		Single-use Needle 0,6x30mm, Pack of 10
DC-503	1		PTFE Tubing 0,7x125mm, Pack of 10



Quartz glass Inserts for Bruker Probes | Product Group B

Article Number	Quantity/Unit Each	Price	Description
DC-402	1	87,00	5mm Quartz glass Insert for newer Probes (5.575 x 6.1 x 64mm)
DC-403	1	87,00	5mm Quartz glass Insert for Dual-Flow Probes (5.575 x 6.1 x 54.5mm)



Sapphire NMR Tubes | Product Group C

Article Number	Quantity/Unit Each	Price	Description
SR-19567	1	645,00	5mm (4.92mm OD) Sapphire Tube, 3.4mm ID, 7" long (178mm), US manufacture
SR-19568	1	400,00	5mm (4.92mm OD) Sapphire Tube, 3.4mm ID, 7" long (178mm), EC manufacture
SR-20060	1	850,00	10mm (9.92mmOD) Sapphire Tube, 7mm ID, 7" long (178mm), US manufacture
SR-20061	1	540,00	10mm (9.92mmOD) Sapphire Tube, 7mm ID, 7" long (178mm), EC manufacture
SR-CUSTOM	-		Other Sizes available on request.

Explosion Protection for Glass / Sapphire / Ceramic NMR Tubes | Product Group A

Article Number	Quantity/Unit Each	Price	Description
RS-EXPL-PROTECT <b>NEW!</b>	1	340,00	Explosion protection for NMR Tubes which have any gas present in excess of 500 Bar For Bruker systems with integrated Optic Sensor and all Varian/Agilent NMR systems up to 500 Bar



Reference Standards for High Resolution Liquids NMR

All Reference standard supplied with a lot certificate of Analysis

All standards are 8" long and are available in the diameters of 1mm, 1.7mm, 2.5mm, 3mm, 5mm, 10mm as standard.

All standards are 4cm fill height. 1cm fill height available as an option for the Temperature Calibration Standards. (add a -1 to the Article Nr.)

Other Standards may be available on request where a minimum order quantity of 10 may apply

Article Number	Quantity/Unit	Price	Description	- X
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<sup>1</sup>H Reference Standards.

RSA-HLSHP-X	1	135,00	1% CHCl <sub>3</sub> in Acetone D-6	1, 1.7, 2.5, 3, 5mm
RSA-HLSHP-10	1	145,00	1% CHCl <sub>3</sub> in Acetone D-6	10mm
RSA-HSN-X	1	125,00	0.1% Ethylbenzene (ETB) in CDCl <sub>3</sub>	1, 1.7, 2.5, 3, 5mm
RSA-HSN-10	1	135,00	0.1% Ethylbenzene (ETB) in CDCl <sub>3</sub>	10mm
RSA-HWS-X	1	135,00	2mM Sucrose, 0.5mM DSS, 2mM NaN <sub>3</sub> in 10% D <sub>2</sub> O, 90% H <sub>2</sub> O	1, 1.7, 2.5, 3, 5mm
RSA-HWS-10	1	145,00	2mM Sucrose, 0.5mM DSS, 2mM NaN <sub>3</sub> in 10% D <sub>2</sub> O, 90% H <sub>2</sub> O	10mm

<sup>13</sup>C Reference Standards.

RSA-ASTM-X	1	100,00	40% Dioxane in Benzene-d <sub>6</sub>	1, 1.7, 2.5, 3, 5mm
RSA-ASTM-10	1	110,00	40% Dioxane in Benzene-d <sub>6</sub>	10mm
RSA-CNE-X	1	180,00	100mM <sup>15</sup> N-enriched Urea, 100mM <sup>13</sup> C-enriched Methanol in DMSO-d <sub>6</sub>	1, 1.7, 2.5, 3, 5mm
RSA-CNE-10	1	190,00	100mM <sup>15</sup> N-enriched Urea, 100mM <sup>13</sup> C-enriched Methanol in DMSO-d <sub>6</sub>	10mm
RSA-DEPT-X	1	135,00	<sup>13</sup> C DEPT - 100mg/ml Cloresteryl Acetate in Chloroform-d	1, 1.7, 2.5, 3, 5mm
RSA-DEPT-10	1	145,00	<sup>13</sup> C DEPT - 100mg/ml Cloresteryl Acetate in Chloroform-d	10mm

<sup>129</sup>Si Reference Standards.

RSA-SISN-X	1	100,00	40% Dioxane in Benzene-d <sub>6</sub>	1, 1.7, 2.5, 3, 5mm
RSA-SISN-10	1	110,00	40% Dioxane in Benzene-d <sub>6</sub>	10mm

Miscellaneous Reference Standards.

RSA-TEMP-X	1	135,00	99.8% Methanol-d <sub>4</sub> , 1cm fill height	1, 1.7, 2.5, 3, 5mm
RSA-TEMP-10	1	145,00	99.8% Methanol-d <sub>4</sub> , 1cm fill height	10mm
RSA-TEMPL-X	1	135,00	4% Methanol in Methanol-d <sub>4</sub> , 1cm fill height	1, 1.7, 2.5, 3, 5mm
RSA-TEMPL-10	1	145,00	4% Methanol in Methanol-d <sub>4</sub> , 1cm fill height	10mm
RSA-TEMPH-X	1	135,00	80% Glycol in DMSO-d <sub>6</sub> , 1cm fill height	1, 1.7, 2.5, 3, 5mm
RSA-TEMPH-10	1	145,00	80% Glycol in DMSO-d <sub>6</sub> , 1cm fill height	10mm

Please contact us for a quotation for shipping of reference standards.

Chamber of Commerce: Stuttgart HRB 762724

Managing Director: Dipl. Ing. David Cross

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E&OE (Errors and Omissions Excluded).

Pricing & Specifications subject to change without notice.