

Gas-Tight Consumables for Liquid & Gas-Phase NMR

Low Pressure/Vacuum Tubes

Wilmad's Low Pressure/Vacuum (LPV) tube is ideal for anaerobic and gas-tight NMR experiments, and offers a convenient flame-free sealing solution for air sensitive or volatile liquid samples.

- Robust sealing system allows pressure build-up inside the sample
- Greaseless PTFE piston provides a 100% contamination-free seal
- Redesigned with a 4X larger sealing surface; eliminates leaks and greatly increases lifetime when compared to traditional J. Young tubes
- Axial symmetric design guarantees application in spinning experiments
- Due to the nature of glass, Extreme Caution should be exercised when using at elevated or reduced pressures since a tiny scratch on the glass surface would significantly lower the tensile strength. Adequate safety shielding should always be used when working in these conditions.



Low Pressure/Vacuum Tube

Catalog No.	MHz Rating	Length	O.D.	Wall Thickness	Concentricity	Camber	Glass Type
335-LPV-7	600	7"	3mm	0.29mm	13 µm	6 µm	Borosilicate
335-LPV-8	600	8"	3mm	0.29mm	13 µm	6 µm	Borosilicate
328-LPV-7	500	7"	3mm	0.29mm	25 µm	13 µm	Borosilicate
328-LPV-8	500	8"	3mm	0.29mm	25 µm	13 µm	Borosilicate
328-LPV-9	500	9"	3mm	0.29mm	25 µm	13 µm	Borosilicate
307-LPV-7	300	7"	3mm	0.29mm	51 µm	25 µm	Borosilicate
307-LPV-8	300	8"	3mm	0.29mm	51 µm	25 µm	Borosilicate
435-LPV-7	600	7"	4mm	0.38mm	13 µm	6 µm	Borosilicate
535-LPV-7	600	7"	5mm	0.38mm	13 µm	6 µm	Borosilicate
535-LPV-8	600	8"	5mm	0.38mm	13 µm	6 µm	Borosilicate
535-LPV-9	600	9"	5mm	0.38mm	13 µm	6 µm	Borosilicate
528-LPV-7	500	7"	5mm	0.38mm	25 µm	13 µm	Borosilicate
528-LPV-7QTZ	500	7"	5mm	0.38mm	25 µm	13 µm	Quartz
528-LPV-8	500	8"	5mm	0.38mm	25 µm	13 µm	Borosilicate
528-LPV-9	500	9"	5mm	0.38mm	25 µm	13 µm	Borosilicate
522-LPV-7	400	7"	5mm	1.40mm	51 µm	51 µm	Borosilicate
524-LPV-7	400	7"	5mm	0.77mm	76 µm	51 µm	Borosilicate

Low Pressure/Vacuum Tube (Continued)

Catalog No.	MHz Rating	Length	O.D.	Wall Thickness	Concentricity	Camber	Glass Type
507-LPV-7	300	7"	5mm	0.38mm	51µm	25µm	Borosilicate
507-LPV-8	300	8"	5mm	0.38mm	51µm	25µm	Borosilicate
507-LPV-9	300	9"	5mm	0.38mm	51µm	25µm	Borosilicate
513-7LPV-7	500	7"	10mm	0.46mm	38µm	13µm	Borosilicate
513-7LPV-8	500	8"	10mm	0.46mm	38µm	13µm	Borosilicate

Low Pressure/Vacuum Tube Parts & Accessories

Catalog No.	Fits Tubes with O.D.	O.D.	Description	Wall Thickness	Concentricity	Camber	Glass Type
GVA-5	3 & 5mm	5mm	Pyrex Adapter	—	—	—	Borosilicate
GVA-5-14/20	3,4, & 5mm	5mm	Pyrex Adapter with 14/20 outer joint	—	—	—	Borosilicate
LPV-O-5	—	—	Replacement O-Rings (5/pack)	—	—	—	—
WNMR-5-PISTON	3 & 5mm	—	PTFE Piston for LPV Tube	—	—	—	—
WNMR-10-PISTON	10mm	—	PTFE Piston for LPV Tube	—	—	—	—
507-LPV-7-T-P	—	5mm	Replacement Glass tube for 507-LPV-7	0.38mm	51 µm	25 µm	Borosilicate
507-LPV-8-T-P	—	5mm	Replacement Glass tube for 507-LPV-8	0.38mm	51 µm	25 µm	Borosilicate
524-LPV-7-T-P	—	5mm	Replacement Glass tube for 524-LPV-7	0.77mm	76 µm	51 µm	Borosilicate
528-LPV-7-T-P	—	5mm	Replacement Glass tube for 528-LPV-7	0.38mm	25 µm	13 µm	Borosilicate
528-LPV-8-T-P	—	5mm	Replacement Glass tube for 528-LPV-8	0.38mm	25 µm	13 µm	Borosilicate
535-LPV-7-T-P	—	5mm	Replacement Glass tube for 535-LPV-7	0.38mm	13 µm	6 µm	Borosilicate
535-LPV-8-T-P	—	5mm	Replacement Glass tube for 535-LPV-8	0.38mm	13 µm	6 µm	Borosilicate

Low Pressure/Vacuum Tube for Autosamplers

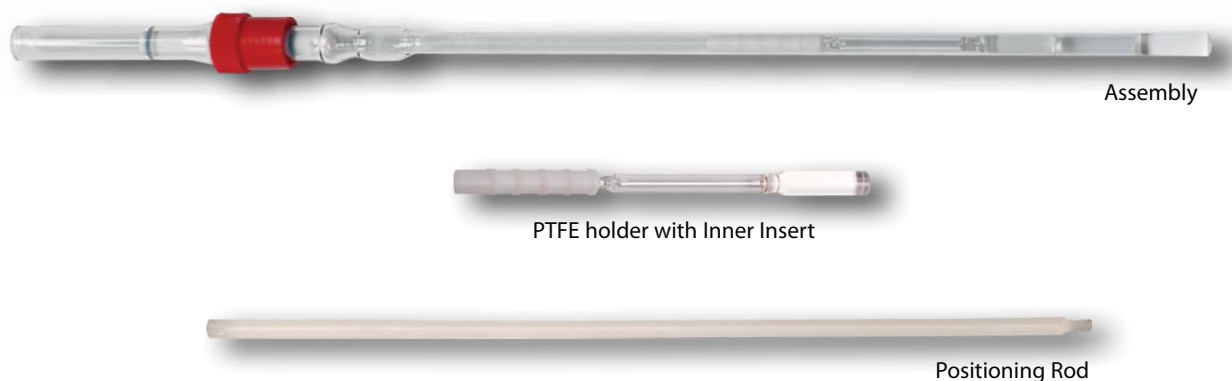
Catalog No.	MHz Rating	Bottom NMR Tube Length	Length after removing the Vacuum Adapter	Concentricity	Camber	Glass Type
535-LPV-200M	600	137 ± 1mm	199 ± 1mm	13 µm	6 µm	Borosilicate
528-LPV-200M	500	137 ± 1mm	199 ± 1mm	25 µm	13 µm	Borosilicate
507-LPV-200M	300	137 ± 1mm	199 ± 1mm	51 µm	25 µm	Borosilicate

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Low Pressure/Vacuum Shigemi Tubes

Low Pressure/Vacuum Shigemi® tubes feature a susceptibility matched bottom and plunger to reduce the boundary gradients at the edges of the Rf coil and a valve that offers a flame-free seal for air sensitive or volatile liquid samples.

- Select tube based on solvent used: Chloroform-d, Methanol-d₄, Deuterium Oxide, or DMSO-d₆
- Tubes available for Bruker®, JEOL®, Agilent®(Varian®) spectrometers



Low Pressure/Vacuum Shigemi Tubes

Catalog No.	Description	O.D.	Bottom Length	Matched Solvent	Compatibility
CMS-005B-LPV	Gas-tight Shigemi® Tube Complete Set	4.965mm	8mm	Chloroform-d	Bruker®
CMS-005J-LPV		4.965mm	12mm		JEOL®
CMS-005V-LPV		4.965mm	15mm		Agilent®(Varian®)
MMS-005B-LPV	Gas-tight Shigemi® Tube Complete Set	4.965mm	8mm	Methanol-d ₄	Bruker®
MMS-005J-LPV		4.965mm	12mm		JEOL®
MMS-005V-LPV		4.965mm	15mm		Agilent®(Varian®)
DMS-005B-LPV	Gas-tight Shigemi® Tube Complete Set	4.965mm	8mm	DMSO-d ₆	Bruker®
DMS-005J-LPV		4.965mm	12mm		JEOL®
DMS-005V-LPV		4.965mm	15mm		Agilent®(Varian®)
BMS-005B-LPV	Gas-tight Shigemi® Tube Complete Set	4.965mm	8mm	Deuterium Oxide	Bruker®
BMS-005J-LPV		4.965mm	12mm		JEOL®
BMS-005V-LPV		4.965mm	15mm		Agilent®(Varian®)
529-C	Positioning Rod	—	—	Universal	All
529-B	PTFE Holder	—	—		All