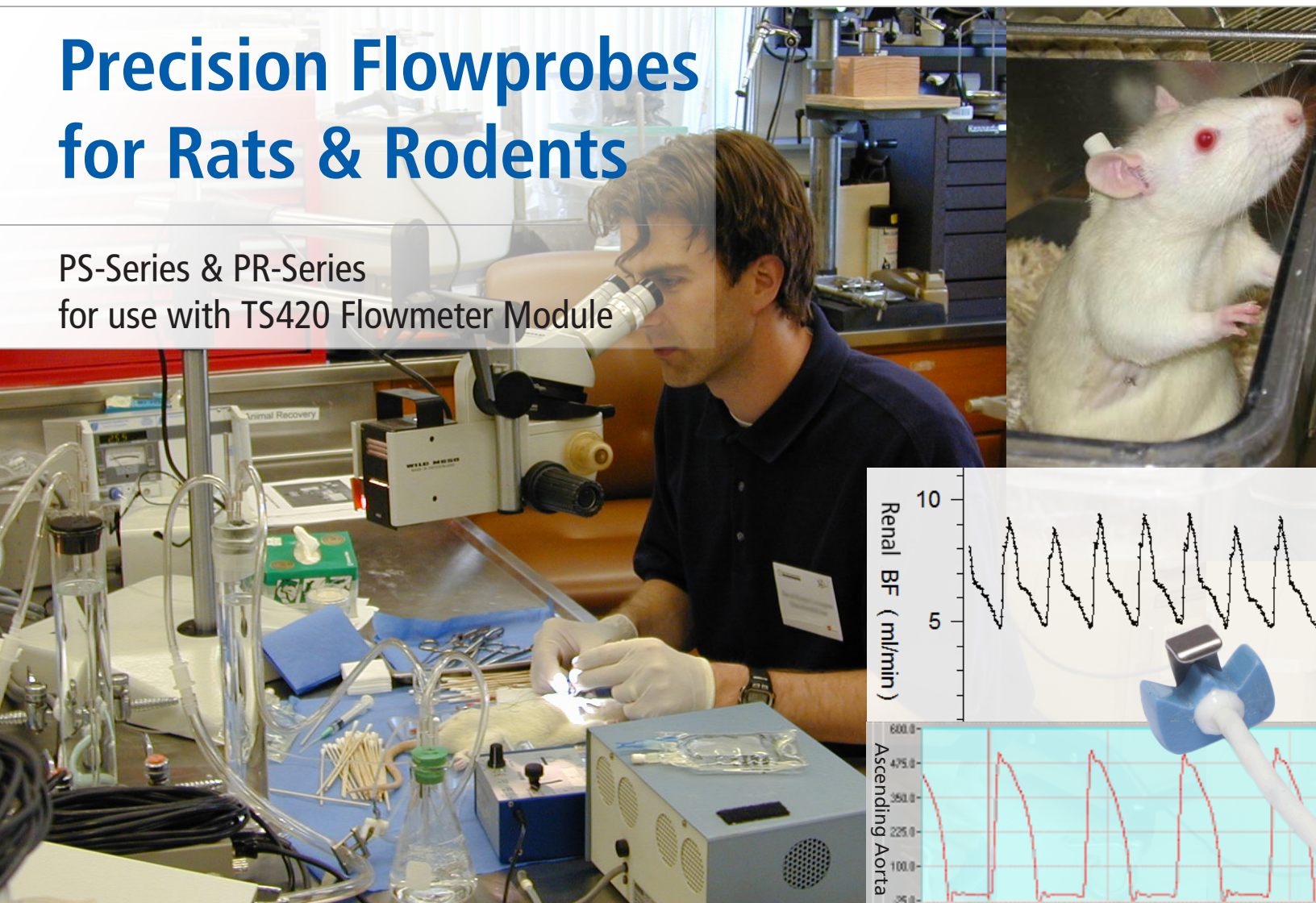


Precision Flowprobes for Rats & Rodents

PS-Series & PR-Series
for use with TS420 Flowmeter Module



- Validated, Referenced, Trusted

- Cited in over 500 studies in rats & rodents
- Gold Standard accuracy
- Ultrasonic Transit-time Technology

- Blood Flow Applications

- Continuous real-time volume flow measurements for numerous applications including: cardiac output, renal or portal hypertension, hemorrhagic shock, ischemia/reperfusion, carotid thrombosis and stroke models.

- Functional & Flexible

- Compatible with electrical swivels and tethers
- Wide range of customizable features
- Acute and chronic use in vessels from 0.25 mm diameter and larger

RAT BLOOD FLOW (wgt. 250-350 g)	
VESSEL	SUGGESTED PROBE
Ascending Aorta	2.5PS, 3PS
Abdominal Aorta	2PS
Pulmonary Artery	2PS
Carotid Artery	1PR, 0.7PS
Femoral Artery	1PR, 0.7PS
Mesenteric Artery	1PR
Renal Artery	1PR, 0.7PS
Portal Vein	1.5PR, 2PS
Hepatic Artery	0.5PS
Vena Cava	2PS, 2.5PS

Specifications & Accessories for Rat Applications

ORDERING PRECISION PROBES

- MA- prefix: standard acute configuration; specify size and cable orientation. Acute 0.5PS & 0.7PS Probes are supplied with a 5 cm handle.
- MC- prefix: custom or chronic configuration; specify size, cable orientation & length, connector type, & calibration option.

Probe size: approximate vessel diameter in mm.

Probe Cable Orientation:

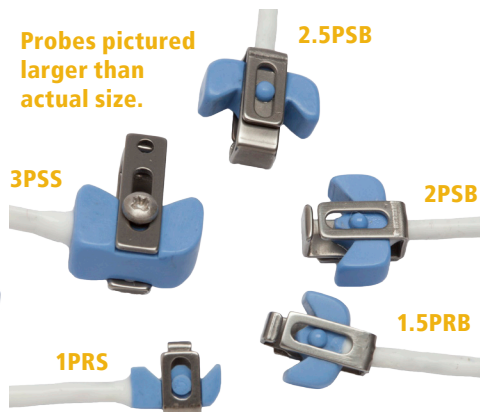
- Back (B): perpendicular to vessel.
- Side (S): parallel to vessel.
- Lateral (L): for ascending aorta via thoracotomy

STABILIZATION ACCESSORIES

For precision measurements, Nanoprobes should be stabilized with a micromanipulator during acute use.

- Cuffs for CA4: Silicone Flange (AAPC103); Rigid Cuff with set screw (AAPC105)
- Cuffs for CM4: Silicone Flange (AAPC102); Rigid Cuff with set screw (AAPC104)
- Surgical mesilene mesh for implant stabilization

Probes pictured larger than actual size.



CONNECTORS

Standard acute use: CRA10 Redel

Chronic mini 4-pin connectors come with serialized calibration keys.

- CA4B (back) & CA4S (side)
- CM4B (back) & CM4S (side)

EXTENSION CABLES

- CRA10-S-CRA10: 10-pin acute; 1.25 meter standard length
- CM4-S-CRA10: 4-pin with spring; 1.8 meter standard length
- CA4-S-CRA10: 4-pin narrow gauge; 1.8 meter standard

Note: Nanoprobes must be used with the proper length extension cable (probe + cable = approx. 185 cm) to meet performance specifications.

Rigid Delrin Cuff with CA4S connector for chronic Probes



Chronic MC2.5PSL with CM4S connector

See [Tools & Techniques for Hemodynamic Studies in Rodents \(RL-5-wb\)](#) for in depth application information and [Perivascular Flowprobe Flyer \(RL-26-fly\)](#) for more information on ordering.

PROBE SIZE & SERIES	VESSEL OD		BIDIRECTIONAL FLOW OUTPUTS				ACCURACY SPECIFICATIONS			ULTRASOUND
	MA-ACUTE APPLICATION	MC-CHRONIC APPLICATION	RESOLUTION	LOW FLOW (¼ SCALE)	STANDARD FLOW	MAX FLOW (STD FLOW)	ZERO OFFSET	ABSOLUTE ACCURACY	RELATIVE ACCURACY	FREQUENCY
	mm	mm	ml/min	ml/min	ml/min	ml/min	ml/min	%	%	MHz
0.5PS	0.3 - 0.5	0.3 - 0.48	0.03	1.5	6	30	± 0.12	± 15	± 2	14.4
0.7PS	0.5 - 0.7	0.4 - 0.7	0.05	2.5	10	50	± 0.2	± 15	± 2	9.6
1.5PS	1.2 - 1.5	1.2 - 1.5	0.075	10	40	200	± 0.8	± 15	± 2	4.8
1PR	0.7 - 1.2	0.7 - 1.0	0.05	5	20	100	± 0.2	± 10	± 2	7.2
1.5PR	1.2 - 1.8	1.0 - 1.5	0.075	10	40	200	± 0.4	± 10	± 2	4.8
2PS	1.5 - 2.0	1.3 - 1.8	0.1	25	100	500	± 1	± 10	± 2	3.6
2.5PS	1.8 - 2.5	1.5 - 2.4	0.1	25	100	500	± 1	± 10	± 2	3.6
3PS	2.5 - 3.7	2.4 - 3.4	0.4	50	200	1 L	± 2	± 10	± 2	3.6

