

## Replacement Back Pressure Regulator (BPR) Cartridges

- Materials of construction: PEEK, ETFE, perfluoroelastomer, and gold-plated stainless steel

These replacement cartridges will operate in any of the standard BPR holders shown on this page. These cartridges create back pressures from 40 to 1,000 psi (2.8 to 69 bar)—all independent of flow except as noted below.

The recommended operating flow rate range for our BPR Cartridges is 0.1 mL–10 mL/min. Within this range, the amount of back pressure created by the BPR Cartridges and Assemblies will not vary more than  $\pm 10\%$ . Lower or higher flow rates may result in larger pressure fluctuations.



**P-761**  
40 psi BPR Cartridge



**P-796**  
1,000 psi BPR Cartridge

## BPR Holders

Upchurch Scientific® P-465 PEEK and U-469 Stainless Steel BPR Holders work with any of our replacement BPR Cartridges. Each holder comes with fittings for 1/16" OD tubing (see below). The U-469 Holder is surface-treated to prevent galling, a potential problem with large, threaded metal parts.

*Please Note: These Back Pressure Regulator Holders are designed to allow each cartridge to operate at its stated pressure setting when tightened to 20 in.-lbs. of torque. To approximate this level of torque, first finger tighten the Holder, then tighten an additional 1/8–1/4 turn with the supplied wrenches.*

Pressure Rating 3,000 psi (207 bar)\*



\* Using PEEK tubing and supplied fittings.

Pressure Rating 4,000 psi (276 bar)\*\*



\*\* Using stainless steel tubing and supplied fittings.

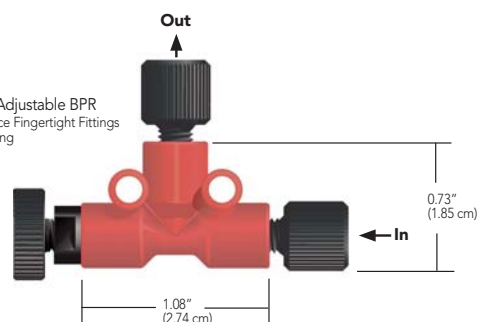
## High Pressure Adjustable BPR

- Materials of construction: PEEK, perfluoroelastomer, and PTFE

The biocompatible P-880 High Pressure Adjustable BPR offers the flexibility to adjust your system back pressure between 2,000 and 5,000 psi (138 and 345 bar), independent of the flow. Only 10% fluctuation in pressure generally occurs with flow rates of 0.1–10 mL/min. Lower or higher flow rates will lead to greater fluctuations in pressure. To achieve the desired back pressure setting, simply turn the thumbscrew while monitoring your system pressure. Because this product creates such high back pressure, please check system component specifications prior to using to avoid damaging any sensitive components.

### P-880

High Pressure Adjustable BPR  
Includes One-Piece Fingertight Fittings  
for 1/16" OD tubing



Part No.	Pressure Setting	Holder Material	Includes	Swept Volume
<b>BPR ASSEMBLIES</b>				
<b>P-790</b>	5 psi (0.3 bar)	PEEK	(2) XP-215	134 $\mu$ L
★ <b>P-791</b>	20 psi (1.4 bar)	PEEK	(2) XP-215	134 $\mu$ L
★ <b>P-785</b>	40 psi (2.8 bar)	PEEK	(1) P-761, (2) XP-215	131 $\mu$ L
★ <b>P-786</b>	75 psi (5.2 bar)	PEEK	(1) P-762, (2) XP-215	131 $\mu$ L
★ <b>P-787</b>	100 psi (7 bar)	PEEK	(1) P-763, (2) XP-215	131 $\mu$ L
<b>P-788</b>	250 psi (17 bar)	PEEK	(1) P-764, (2) XP-235	102 $\mu$ L
<b>P-789</b>	500 psi (34 bar)	PEEK	(1) P-765, (2) P-250, (2) LT-115	96 $\mu$ L
<b>P-455</b>	1,000 psi (69 bar)	PEEK	(1) P-796, (2) P-250, (2) LT-115	89 $\mu$ L
<b>U-605</b>	40 psi (2.8 bar)	SST	(1) P-761, (2) XP-201	129 $\mu$ L
<b>U-606</b>	75 psi (5.2 bar)	SST	(1) P-762, (2) XP-201	129 $\mu$ L
★ <b>U-607</b>	100 psi (7 bar)	SST	(1) P-763, (2) XP-201	129 $\mu$ L
<b>U-608</b>	250 psi (17 bar)	SST	(1) P-764, (2) XP-201	99 $\mu$ L
<b>U-609</b>	500 psi (34 bar)	SST	(1) P-765, (2) XP-201	93 $\mu$ L
<b>U-610</b>	750 psi (52 bar)	SST	(1) P-795, (2) P-250, (2) LT-115	91 $\mu$ L
<b>REPLACEMENT CARTRIDGES</b>				
Part No.	Pressure Setting	Body	End-Cap	Swept Volume
<b>P-761</b>	40 psi (2.8 bar)	Tan	Blue	125 $\mu$ L
<b>P-762</b>	75 psi (5.2 bar)	Tan	Yellow	125 $\mu$ L
★ <b>P-763</b>	100 psi (7 bar)	Tan	Red	125 $\mu$ L
<b>P-764</b>	250 psi (17 bar)	Tan	White	95 $\mu$ L
<b>P-765</b>	500 psi (34 bar)	Tan	Green	89 $\mu$ L
<b>P-795</b>	750 psi (52 bar)	Black	Blue	87 $\mu$ L
<b>P-796</b>	1,000 psi (69 bar)	Black	Green	83 $\mu$ L
<b>BPR HOLDERS</b>				
Part No.	Holder Style	Holder Material	Includes	Swept Volume
<b>P-465</b>	Biocompatible BPR	PEEK	(2) P-250, (2) LT-115	7 $\mu$ L
<b>U-469</b>	High Pressure BPR	SST	(2) F-300	4 $\mu$ L
<b>HIGH PRESSURE ADJUSTABLE BPR ASSEMBLY</b>				
★ <b>P-880</b>	2,000–5,000 psi (138–345 bar)		(2) F-120BLK	9 $\mu$ L