

# + Innovalloy® P 60

Pharmaceutical Chemical Resistant Peristaltic Pump Tubing



The special structural hose designed for the transmission of various chemical reagents ensures good resistance to various corrosive liquids, and is especially suitable for the transmission of acids, alkalis, ketones, and alcohols.

**Comply with USP, ISO 10993 requirements**

**Pharmaceutical Grade**

Innovalloy P 60 series has a low permanent compression deformation, which can ensure that the peristaltic pump can rebound to the original shape even if it is continuously squeezed in the long-term use of the peristaltic pump, ensuring the stability of the liquid transmission flow. At the same time, it adopts a double-layer structure, and the

special corrosion-resistant inner layer material ensures good resistance to strong acids, strong alkalis and most organic solvents, and can be widely used in various high and low temperature environments (-50 degrees to 80 degrees), organic Acid-base solution delivery, laboratory, medical and pharmaceutical peristaltic pump applications.

## + Features

- Beige color
- Long peristaltic pump life
- good chemical resistance
- Resistance to chemical swelling
- No added plasticizer
- Very low gas permeability
- 70A shore hardness
- Available in various metric and imperial sizes

## + Regulations & Certifications

- FDA 21CFR 177.2600
- ISO 10993
- RoHS
- REACH

## + Application

- Chemical Reagent Delivery
- formulation delivery
- Laboratory chemical reagent transfer
- buffer transfer
- Medium transfer
- gas transfer line
- Corrosive liquid transfer lines

## + Innovalloy® P 60 Typical Physical Properties

Physical Properties Table	Test Methods	Unit	Typical Value
Color	-		Beige
Shore A hardness, 5sec	ASTM D 2240		70
Density	ASTM D 792		0.97
Operating temperature			-50°C to +80°C
Anti-UV			Excellent
Gas permeability			Low
Water absorption			Low
Tensile strength at break	ASTM D 412	Mpa	7.2
Tensile elongation at break	ASTM D 412	%	420
Tear tensile strength	ASTM D1004-94	kN/m	22
Permanent compression set, 70°C22hrs	ASTM D395-98-B	%	25
Embrittlement temperature	ASTM D 746	°C	-60

## + Innovalloy® P 60 Inventoried Sizes\*

\*Other calibers, lengths or packing methods can be customized

Cat. No.	Model	ID		OD		Wall Thickness		Length Per Package <sup>1</sup>	Minimum Bending Radius	RECO Working Pressure	RECO Vacuum Pressure
		(mm)	(inch)	(mm)	(inch)	(mm)	(inch)				
A4PO-201-0050-0150	Metric size	0.50		1.50		0.50		15.2	50	2mm	1.0bar
A4PO-201-0079-0397	13#	0.79	1/32	3.97	5/32	1.59	1/16	15.2	50	3mm	6.8bar
A4PO-201-0100-0200	Metric size	1.00		2.00		0.50		15.2	50	3mm	1.0bar
A4PO-201-0150-0250	Metric size	1.50		2.50		0.50		15.2	50	3mm	1.0bar
A4PO-201-0100-0300	Metric size	1.00		3.00		1.00		15.2	50	6mm	1.0bar
A4PO-201-0159-0318		1.59	1/16	3.18	1/8	0.79	1/32	15.2	50	6mm	2.1bar
A4PO-201-0159-0476	14#	1.59	1/16	4.76	3/16	1.59	1/16	15.2	50	6mm	2.9bar
A4PO-201-0159-0635	119#	1.59	1/16	6.35	1/4	2.38	3/32	15.2	50		
A4PO-201-0200-0400	Metric size	2.00		4.00		1.00		15.2	50		
A4PO-201-0238-0556	19#	2.38	3/32	5.56	7/32	1.59	1/16	15.2	50	6mm	2.5bar
A4PO-201-0300-0500	Metric size	3.00		5.00		1.00		15.2	50		
A4PO-201-0318-0476		3.18	1/8	4.76	3/16	0.79	1/32	15.2	50	12mm	1.1bar
A4PO-201-0318-0635	16#	3.18	1/8	6.35	1/4	1.59	1/16	15.2	50	12mm	1.6bar
A4PO-201-0318-0794	120#	3.18	1/8	7.94	5/16	2.38	3/32	15.2	50		
A4PO-201-0397-0714		3.97	5/32	7.14	9/32	1.59	1/16	15.2	50		
A4PO-201-0476-0794	25#	4.76	3/16	7.94	5/16	1.59	1/16	15.2	50	19mm	1.1bar
A4PO-201-0476-0953	15#	4.76	3/16	9.53	3/8	2.38	3/32	15.2	50	12mm	1.6bar
A4PO-201-0635-0953	17#	6.35	1/4	9.53	3/8	1.59	1/16	15.2	50	22mm	0.9bar
A4PO-201-0635-1111	24#	6.35	1/4	11.11	7/16	2.38	3/32	15.2	50	19mm	1.3bar
A4PO-201-0635-1270	26#	6.34	1/4	12.70	1/2	3.18	1/8	15.2	50	19mm	1.6bar
A4PO-201-0794-1111	18#	7.94	5/16	11.11	7/16	1.59	1/16	15.2	50	32mm	0.9bar
A4PO-201-0794-1270	35#	7.94	5/16	12.70	1/2	2.38	3/32	15.2	50	25mm	1.0bar
A4PO-201-0953-1270	96#	9.53	3/8	12.70	1/2	1.59	1/16	15.2	50	35mm	0.6bar
A4PO-201-0953-1429	36#	9.53	3/8	14.29	9/16	2.38	3/32	15.2	50	38mm	0.9bar
A4PO-201-0953-1588	73#	9.53	3/8	15.88	5/8	3.18	1/8	15.2	50	29mm	1.1bar
A4PO-201-1111-1429		11.11	7/16	14.29	9/16	1.59	1/16	15.2	50	57mm	0.5bar
A4PO-201-1270-1588		12.70	1/2	15.88	5/8	1.59	1/16	15.2	50	76mm	0.5bar
A4PO-201-1270-1905	82#	12.70	1/2	19.05	3/4	3.18	1/8	15.2	50	29mm	0.9bar
A4PO-201-1270-2223	88#	12.70	1/2	22.23	7/8	4.76	3/16	15.2	50	80mm	1.3bar
A4PO-201-1588-2064		15.88	5/8	20.64	13/16	2.38	3/32	15.2	50	83mm	0.6bar
A4PO-101-1588-2223	184#	15.88	5/8	22.23	7/8	3.18	1/8	7.62	25	70mm	0.8bar
A4PO-101-1588-2540	89#	15.88	5/8	25.4	1	4.76	3/16	7.62	25		
A4PO-101-1905-2540		19.05	3/4	25.4	1	3.18	1/8	7.62	25	89mm	0.6bar
A4PO-101-1905-2858	191#	19.05	3/4	28.58	1-1/8	4.76	3/16	7.62	25		
A4PO-101-1905-3175	91#	19.05	3/4	31.75	1-1/4	6.35	1/4	7.62	25		
A4PO-101-2540-3175		25.40	1	31.75	1-1/4	3.18	1/8	7.62	25	127mm	0.5bar
A4PO-101-2540-3493	92#	25.40	1	34.93	1-3/8	4.76	3/16	7.62	25		
A4PO-101-2540-3810		25.40	1	38.10	1-1/2	6.35	1/4	7.62	25		

<sup>1</sup>The recommended working pressure is the calculated value of the burst pressure measured by ASTM D1599 at a ratio of 1:4 at 23 degrees. For the detailed compatibility of Innovalloy® P 60 with various chemical solvents, please refer to "Innovalene® Product Chemical Compatibility Information Sheet" or consult our sales staff