



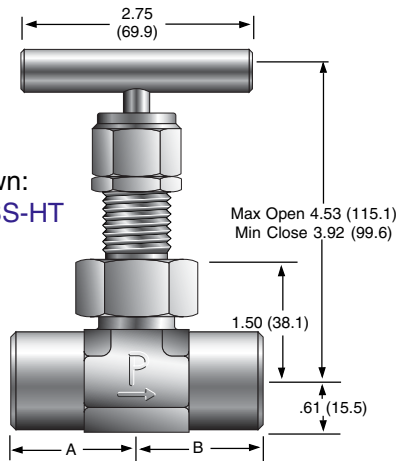
Needle Valves (U Series)

*Catalog 4110-U
Revised, August 2004*



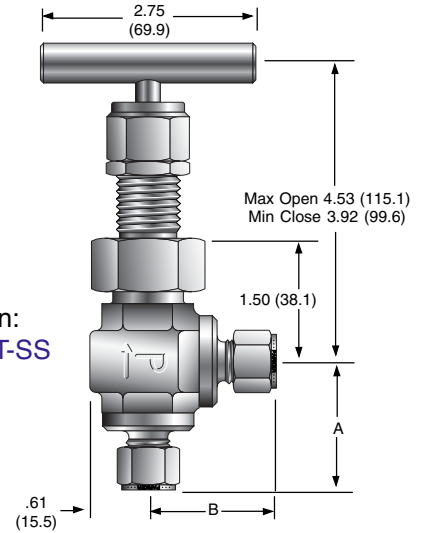
U Series Needle Valves

Model Shown:
6F-U12LB-G-SS-HT



Panel Hole Diameter:
0.83 (21.1)
Max Panel Thickness:
0.61 (15.5)

Model Shown:
M12A-U12AB-T-SS



U12 Series Dimensions / Flow Data

() Denotes dimensions in millimeters

Basic Part Number		End Connections		Stem Type	Flow Data						Dimensions			
Inline	Angle	Inlet (Port 1)	Outlet (Port 2)		Orifice		Inline		Angle		A†		B†	
					Inch	mm	C_v	x_T^*	C_v	x_T^*	C_v	x_T^*	Inch	mm
4A-U12LR 4A-U12LB	4A-U12AR 4A-U12AB	1/4" Compression A-LOK®		Regulating Blunt	0.125	3.2	0.44 0.51	0.57 0.40	0.60 0.68	0.49 0.33	1.39	35.3	1.39	35.3
4F-U12LR 4F-U12LB	4F-U12AR 4F-U12AB	1/4" Female NPT		Regulating Blunt	0.250	6.4	0.94 1.03	0.65 0.60	1.25 1.37	0.55 0.51	1.13	28.7	1.13	28.7
4Z-U12LR 4Z-U12LB	4Z-U12AR 4Z-U12AB	1/4" Compression CPI™		Regulating Blunt	0.125	3.2	0.44 0.51	0.57 0.40	0.60 0.68	0.49 0.33	1.39	35.3	1.39	35.3
6A-U12LR 6A-U12LB	6A-U12AR 6A-U12AB	3/8" Compression A-LOK®		Regulating Blunt	0.187	4.7	0.69 0.77	0.61 0.50	0.92 1.02	0.52 0.42	1.60	40.6	1.60	40.6
6F-U12LR 6F-U12LB	6F-U12AR 6F-U12AB	3/8" Female NPT		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.30	33.0	1.30	33.0
6W-U12LR 6W-U12LB	6W-U12AR 6W-U12AB	3/8" Tube Socket Weld		Regulating Blunt	0.228	5.8	0.85 0.94	0.64 0.57	1.13 1.25	0.54 0.48	1.13	28.7	1.13	28.7
6Z-U12LR 6Z-U12LB	6Z-U12AR 6Z-U12AB	3/8" Compression CPI™		Regulating Blunt	0.187	4.7	0.69 0.77	0.61 0.50	0.92 1.02	0.52 0.42	1.60	40.6	1.60	40.6
8A-U12LR 8A-U12LB	8A-U12AR 8A-U12AB	1/2" Compression A-LOK®		Regulating Blunt	0.250	6.4	0.94 1.03	0.65 0.60	1.25 1.37	0.55 0.51	1.49	37.8	1.49	37.8
8F-U12LR 8F-U12LB	8F-U12AR 8F-U12AB	1/2" Female NPT		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.50	38.1	1.50	38.1
8W-U12LR 8W-U12LB	8W-U12AR 8W-U12AB	1/2" Tube Socket Weld		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.25	31.8	1.25	31.8
8Z-U12LR 8Z-U12LB	8Z-U12AR 8Z-U12AB	1/2" Compression CPI™		Regulating Blunt	0.250	6.4	0.94 1.03	0.65 0.60	1.25 1.37	0.55 0.51	1.49	37.8	1.49	37.8
M10A-U12LR M10A-U12LB	M10A-U12AR M10A-U12AB	10mm Compression A-LOK®		Regulating Blunt	0.250	6.4	0.94 1.03	0.65 0.60	1.25 1.37	0.55 0.51	1.53	38.9	1.53	38.9
M10Z-U12LR M10Z-U12LB	M10Z-U12AR M10Z-U12AB	10mm Compression CPI™		Regulating Blunt	0.250	6.4	0.94 1.03	0.65 0.60	1.25 1.37	0.55 0.51	1.53	38.9	1.53	38.9
M12A-U12LR M12A-U12LB	M12A-U12AR M12A-U12AB	12mm Compression A-LOK®		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.70	43.2	1.70	43.2
M12Z-U12LR M12Z-U12LB	M12Z-U12AR M12Z-U12AB	12mm Compression CPI™		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.70	43.2	1.70	43.2
M14A-U12LR M14A-U12LB	M14A-U12AR M14A-U12AB	14mm Compression A-LOK®		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.70	43.2	1.70	43.2
M14Z-U12LR M14Z-U12LB	M14Z-U12AR M14Z-U12AB	14mm Compression CPI™		Regulating Blunt	0.312	7.9	1.19 1.31	0.78 0.80	1.58 1.74	0.66 0.68	1.70	43.2	1.70	43.2

* Tested in accordance with ISA S75.02. Gas flow will be choked when $P_1 - P_2 / P_1 = x_T$.
† For CPI™ and A-LOK®, dimensions are measured with nuts in the finger tight position