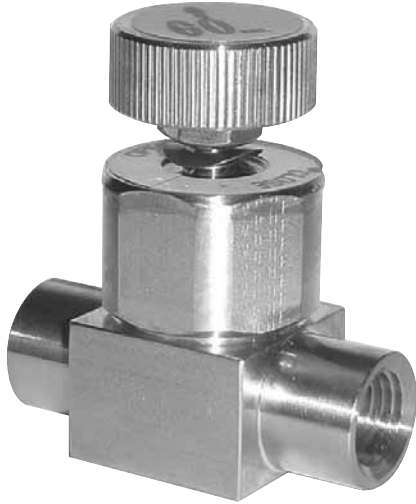


# DV1 Series

## Manual 1/4-plus Turn Valves



### Technical Data

<b>BODY</b>	316L stainless steel, MONEL® and HASTELLOY® C-276
<b>SEATS</b>	PCTFE and PEEK™
<b>DIAPHRAGMS</b>	Elgiloy®AMS 5876
<b>ORIFICE SIZE</b>	0.110" (2.8 mm)
<b>FLOW CAPACITY</b>	0.17 Cv
<b>VALVE INTERNAL VOLUME*</b>	0.16 cc
<b>LEAKAGE</b>	$1 \times 10^{-9}$ cc/sec helium (inboard)

\* Internal volume in machined passages of the valve body between mounting surface and sealing diaphragm(s).

### Operating Pressures

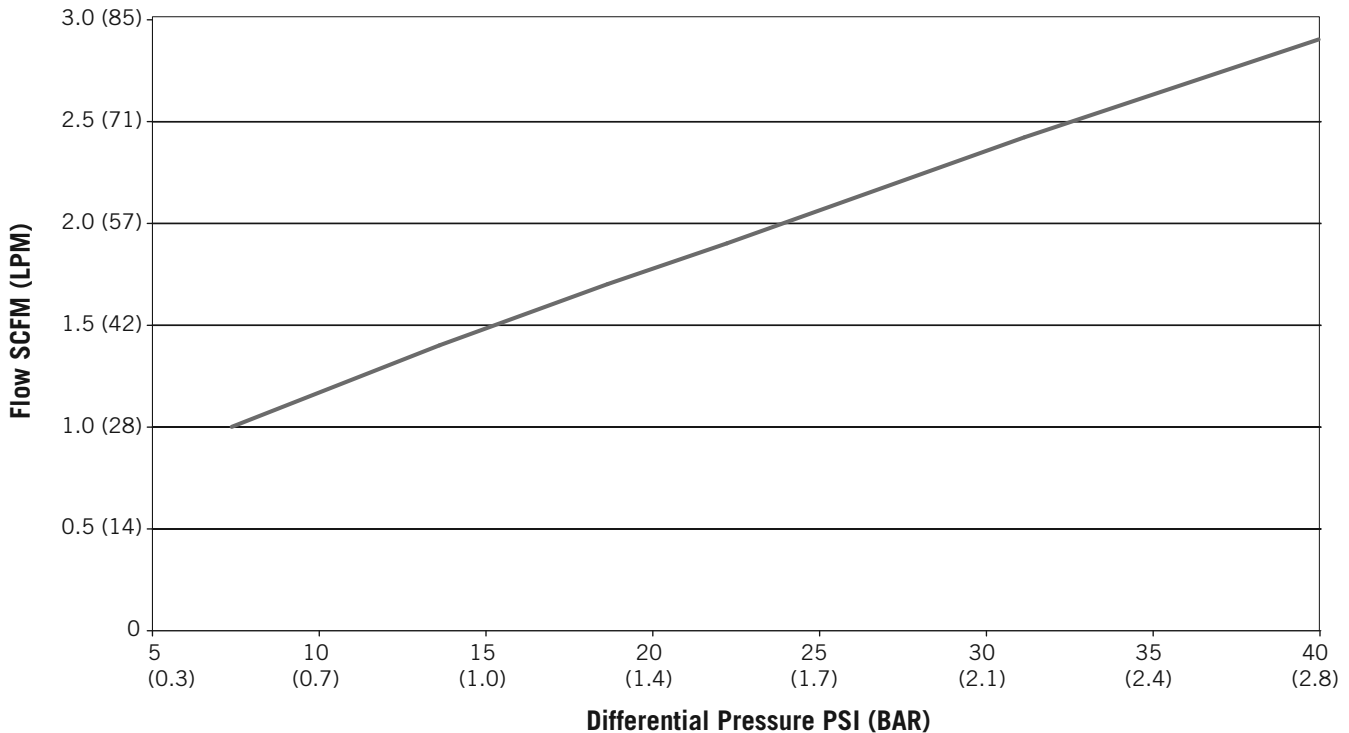
<b>OPERATING PRESSURE*</b>	Vacuum (50 torr) to 3600 psig (248 bar)
<b>PROOF PRESSURE</b>	7200 psig
<b>BURST PRESSURE</b>	14,400 psig (497 barg)

\* Valves cleaned for oxygen service are limited to 3000 psig (207 bar).

### Operating Temperatures

SEAT MATERIAL	1/4-PLUS TURN TEMPERATURE
PCTFE	-40° F to +212° F (-40° C to +100° C)
PEEK™	-40° F to +400° F (-40° C to +204° C)

## Pressure vs. Flow Curve



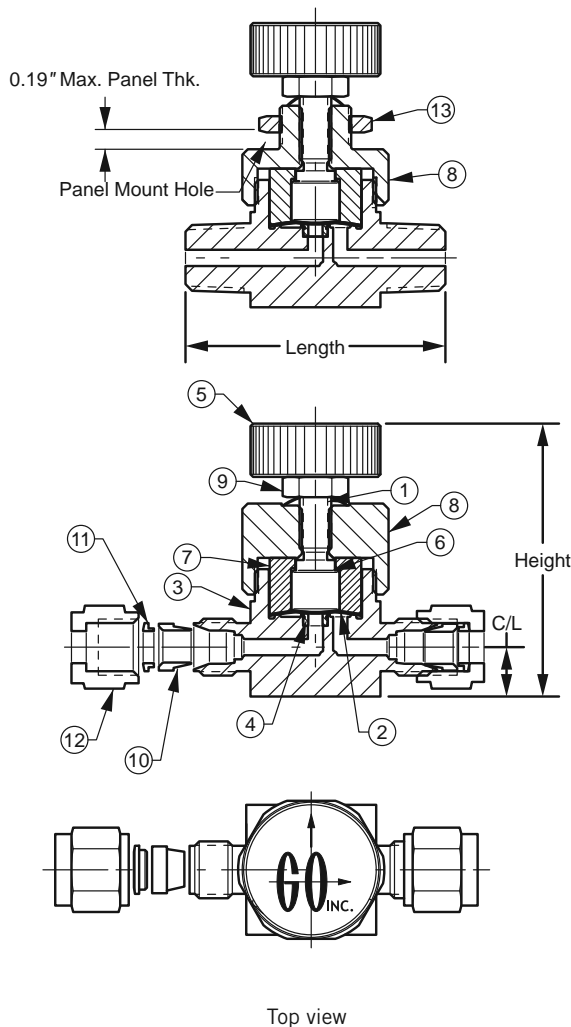
# DV1 Series

## Materials of Construction

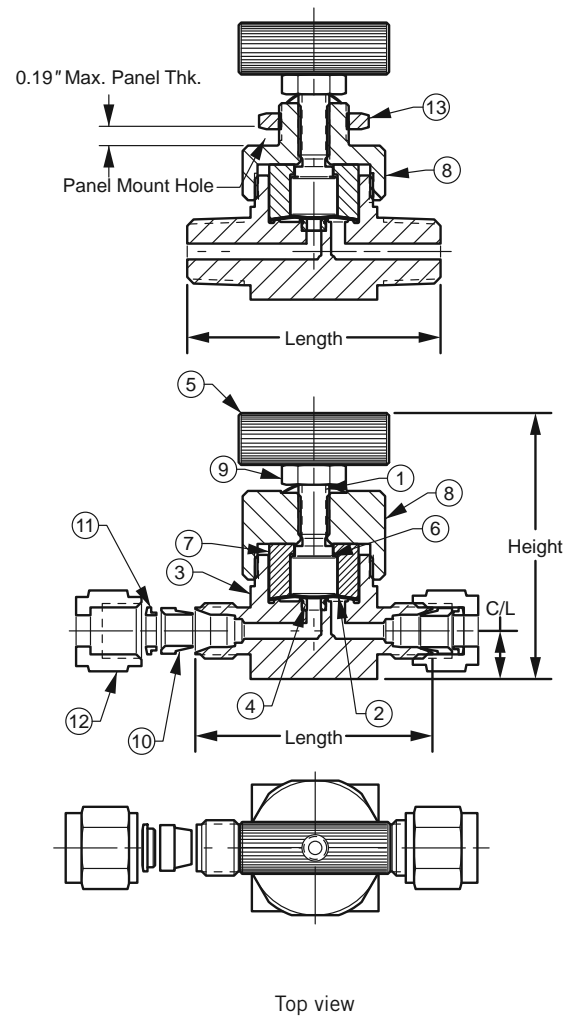
#	PART	MATERIALS
1	Stem	17-4PH stainless steel, condition H900
2	Diaphragm*	Elgiloy®/AMS 5876
3	Body*	316L stainless steel, MONEL®, HASTELLOY® C-276
4	Seat*	PCTFE, PEEK™
5	Handle	316 stainless steel
6	Thrust plug	Brass
7	Diaphragm retainer	316 stainless steel
8	Bonnet	316L stainless steel, MONEL®, HASTELLOY® C-276
9	Handle nut	18-8 stainless steel
10	Front ferrule*	316L stainless steel, MONEL®, HASTELLOY® C-276
11	Rear ferrule	316L stainless steel, MONEL®, HASTELLOY® C-276
12	Nut	316L stainless steel, MONEL®, HASTELLOY® C-276
13	Panel-mount nut	316L stainless steel, MONEL®, HASTELLOY® C-276

\*Wetted components

### Manual ¼-plus turn Valves



### Optional T-handle Valves



## Dimensions

### Manual ¼-plus Turn Valves

END CONNECTION	LENGTH	HEIGHT	HANDLE RADIUS	C/L CENTER LINE	PANEL MOUNT HOLE	PANEL MOUNT THICK
¼" MNPT	2.00"	2.44"	0.90"	0.38"	0.57"	0.19"
¼" FNPT	2.00"	2.44"	0.90"	0.38"	0.57"	0.19"
½" GYROLOK®	1.71"	2.44"	0.90"	0.38"	0.57"	0.19"
¼" NPT extended	3.15"	2.44"	0.90"	0.38"	0.57"	0.19"
6mm GYROLOK®	47.5mm	61.98mm	22.86mm	9.65mm	14.48mm	4.83mm
8mm GYROLOK®	47.5mm	61.98mm	22.86mm	9.65mm	14.48mm	4.83mm