

DESCRIPTION

The HP-40 is an ultra high pressure control valve utilizing a tri-axially forged stainless steel body along with a solid Stellite innervalue assembly. The HP-40 can be used for both flow control as well as a Class IV shutoff valve. The versatility of the HP-40 creates a singular solution for your high pressure applications.

APPLICATION

The HP-40 valve is used in industrial applications, research and process pilot plants on liquids and gases. The main use is in high-pressure, chemical injection utilized in the production of high-pressure, low density polyethylene (HPLDPE).

MATERIALS OF CONSTRUCTION

- Body: Tri-axially forged 316 stainless
- Innervalue: Stellite 6B (plug and seat)
- Packing: Standard- Torlon®/PFA CV rings
- Actuator: Painted carbon steel, nickel plated carbon steel, and stainless steel

ACTUATOR

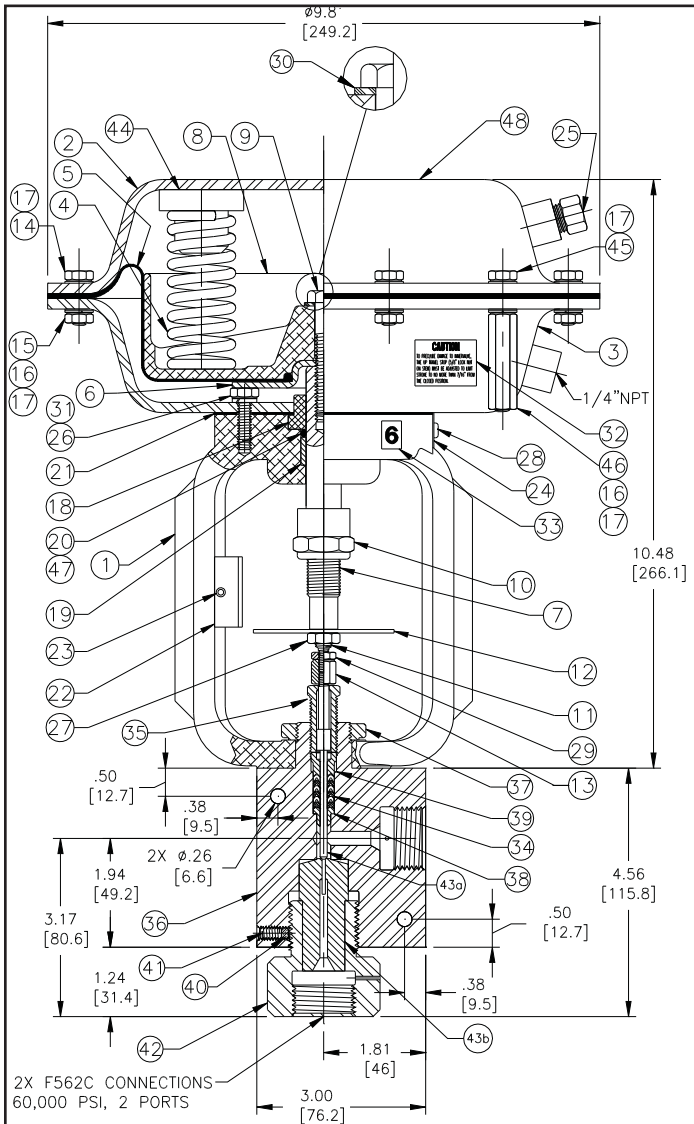
- Standard:
 - Air to open, fail close
 - Air to close, fail open
- Effective Area: 35 square inches
- Standard Signals: 3-15#, 3-27#, 6-30#*, 22-45#*
- Optional Signals: With positioner: 3-9#*, 9-15#*
- Accessories: Filter regulator, gauges, I/P converter, handwheel, limit switches, solenoids

**Positioner Required*



STANDARD FEATURES

- Wide range of interchangeable trims
- Choice of linear or quick opening trims
- ANSI Class III shutoff (size "P-1" thru "P-9")
- ANSI Class IV shutoff (size "K" through "O")
- Solid Stellite innervalue
- Optional: Titanium Nitride Coated Stellite
- 9/16" high-pressure cone and collan fittings
- Pressure rating of 40,000 psia (47,150 Bar) @100°F (38°C)



TRIM CHART

TRIM	MAX CV	ORIFICE DIAMETER	ORIFICE AREA
I*	0.08	0.1000	0.0079
J*	0.05	0.1000	0.0079
K	0.03	0.0860	0.0058
L	0.02	0.0860	0.0058
M	0.01	0.0860	0.0058
N	0.006	0.0860	0.0058
O	0.003	0.0860	0.0058
P1	0.002	0.0625	0.0031
P2	0.0013	0.0625	0.0031
P3	0.001	0.0625	0.0031
P4	0.0006	0.0625	0.0031
P5	0.0004	0.0625	0.0031
P6	0.00027	0.0625	0.0031
P7	0.00018	0.0625	0.0031
P8	0.00012	0.0625	0.0031
P9	0.00008	0.0625	0.0031

*Special Order

ITEM NO.	PART NUMBER	QTY	DESCRIPTION	MATERIAL
1	527588-0001	1	YOKE	STEEL
2	526041-0001	1	PRESS CASE	STEEL
3	526042-0001	1	SPRING CASE	STEEL
4	510031-0149	3	SPRING	17-7 SST
5	512698-0002	1	DIAPHRAGM	BUNA-N
6	512883-0001	1	RETAINER DIAPH.	STEEL
7	527448-0001	1	STEM	316 SST
8	512882-0001	1	PISTON	STEEL
9	400013-0085	1	5/16-24 SCREW	STEEL
10	527628-0001	1	NUT TRAVEL STOP	300 SER SST
11	527589-0001	1	STEM CONNECTOR	300 SER SST
12	512879-0003	1	TRAVEL POINTER	NYLON
13	520391	1	10-32 CONN	316 SST
14	400013-0002	10	5/16-24 SCREW	300 SER SST
15	430004-0021	12	LK WASHER,5/16	300 SER SST
16	410001-0060	10	5/16 NUT	300 SER SST
17	430002-0107	24	5/16 WASHER	300 SER SST
18	512880-0001	1	UPPER BUSHING	NYLATRON
19	460019-0001	1	LOWER BUSHING	POLYMER
20	490018-0003	1	ORING	ELF NITRILE
21	512712-0001	1	GASKET	CARBON/NITRILE
22	527233-0004	1	TRAVEL SCALE	ALUMINUM
23	400006-0056	1	SET SCREW	300 SER SST
24	512923-0001	1	NAMEPLATE	300 SER SST
25	526037-0001	1	VENT PLUG	PLASTIC
26	526119-0002	6	1/4-20 SCREW	STL/FLUORO
27	410001-0058	1	5/16 NUT	300 SER SST
28	400001-0013	2	SCREW 6-32	300 SER SST
29	410011	1	NUT 10-32	300 SER SST
30	527432-0001	1	WASHER THRUST	STEEL
31	430004-0014	6	1/4 LK WASHER	300 SER SST
32	512717-0001	1	CAUTION DECAL	MYLAR
33	512914-0002	1	DECAL	VINYL/MYLAR
34	544489-0001	1	PACKING SET	TORLON & PFA
35	522622-0001	1	GLAND PKG	303 SER. SST
36	522843	1	BODY & BONNET	316 SST
37	522696-0001	1	NUT LOCK	303 SER. SST
38	523185-0001	1	ADAPTOR	416 SST
39	522774-0001	1	FOLLOWER	416 SST
40	522569	1	ADAPTOR LOCK	BRASS
41	400006-0045	1	SCREW SET	300 SER. SST
42	522694-0001	1	ADAPTOR LWR	316 SST
43a	SEE NOTE 1	1	INNERVALVE	
43b	SEE NOTE 1	1	SEAT	
44	500458-0025	-	GREASE	---
45	528029-0001	1	TRAVEL STOP	ALUMINUM

Stainless Steel Actuator and hardware are available for explosion-proof requirements.

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