

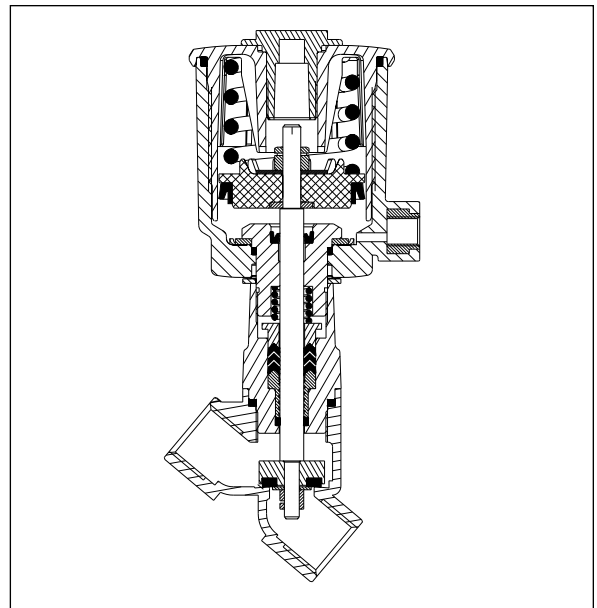
Features

- Tough valves for serious applications, including corrosives, light slurries, and steam to 366°F (186°C).
- Designed for over 1 million cycles.
- Fluid passes under the disc for slower closing, anti-water hammer operation.
- Reversed flow available for high-cycle steam applications.
- Spring-loaded stem seal protects moving parts from harmful grit.
- Bubble-tight shutoff.
- Tough, fiber composite operator, 50 mm, 63 mm, or 90 mm, rotates 360°.
- Options include metering, clamp and spigot connections.
- Can be provided piped up with ASCO sub-miniature pilot valves.
- Mountable in any position.



Construction

Valve Parts in Contact with Fluids		
Body	Bronze	316L Stainless Steel
Stem	303 Stainless Steel	
Stuffing Box	Brass or 303 Stainless Steel	
Stuffing Box Seal	PTFE Chevron	
Wiper Seal	FKM	
Disc	Brass or 303 Stainless Steel	
Disc Seal	PTFE	
Actuator	Glass-filled PA	



Specifications

Fluids Handled: Air, Water, Inert Gas, Oil, Light Slurries, and Steam.

Fluid Temperature: 15°F to 366°F (-9°C to 186°C)

Ambient Temperature Range: 15°F to 150°F (-9°C to 66°C)

Differential Pressures: All Fluids: 0 to 240 psi (0 to 17 bar);

Steam: 0 to 150 psi (0 to 10 bar)

Maximum Operating Pressure: 240 psi (17 bar)

Maximum Viscosity: 2,700 SSU

Pilot Valve:

Pilot Fluids: Filtered Air or Water

Pilot Pressure Range: 60 -150 psi (4-10 bar)

Cv: 50 mm & 63 mm Operator = 0.06 minimum

90 mm Operator = 0.1 minimum

Pilot Port: 50 mm & 63 mm Operator - 1/8" NPT; 90 mm - 1/4" NPT

Optional Ordering Specifications:

Visual position indicator for Normally Closed (NC) valve with 50 mm operator, add suffix "VI"; oxygen service, add suffix "N".

NET-INOX treatment (Stainless Steel valve body pickled in nitric/hydrofluoric acid bath) available on request. *For all AISI 316L Stainless Steel version, contact your local ASCO sales office.*

For low minimum pilot pressures (22 or 38 psi), contact your local ASCO sales office.

Specifications (English units)

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor	Pilot Pressure (psi)		Maximum Pressure Differential (psi)		Bronze Body	316L Stainless Steel Body
			Min.	Max.	Fluids	Steam	Catalog Number	Catalog Number
50 mm Operator								
NORMALLY CLOSED (Entry under disc)								
1/2	1/2	5.7	60	150	240	150	8290A384	8290A393
3/4	3/4	11	60	150	150	150	8290A385	8290A394
1	1	15	60	150	90	90	8290A386	8290A395
NORMALLY OPEN (Entry under disc) - Pilot Pressure: see graphs with dimensional drawings								
1/2	1/2	5.7	I ①	150	240	150	8290A387	8290A396
3/4	3/4	11	I ①	150	240	150	8290A388	8290A397
1	1	15	I ①	150	240	150	8290A389	8290A398
NORMALLY CLOSED (Entry above disc) - Rapid Cycling Steam Applications								
1/2	1/2	5.7	II ①	150	-	150	8290A390	8290A399
3/4	3/4	11	II ①	150	-	150	8290A391	8290A400
1	1	15	II ①	150	-	150	8290A392	8290A401
63 mm Operator								
NORMALLY CLOSED (Entry under disc)								
1/2	1/2	5.7	60	150	240	150	8290A002	8290A045
3/4	3/4	11	60	150	240	150	8290A005	8290A048
1	1	19	60	150	150	150	8290A010	8290A053
1 1/4	1 1/4	36	60	150	90	90	8290A016	8290A059
1 1/2	1 1/2	45	60	150	60	60	8290A020	8290A063
2	2	66	60	150	40	40	8290A024	8290A067
NORMALLY OPEN (Entry under disc)								
1/2	1/2	5.7	III ①	150	240	150	8290A026	8290A069
3/4	3/4	11	III ①	150	240	150	8290A027	8290A070
1	1	19	III ①	150	240	150	8290A028	8290A071
1 1/4	1 1/4	36	III ①	150	240	150	8290A030	8290A073
1 1/2	1 1/2	45	III ①	150	160	150	8290A032	8290A075
2	2	66	III ①	150	105	105	8290A034	8290A077
NORMALLY CLOSED (Entry above disc) - Rapid Cycling Steam Applications								
1/2	1/2	5.7	IV ①	150	-	150	8290A036	8290A079
3/4	3/4	11	IV ①	150	-	150	8290A037	8290A080
1	1	19	IV ①	150	-	150	8290A038	8290A081
1 1/4	1 1/4	36	IV ①	150	-	150	8290A039	8290A082
1 1/2	1 1/2	45	IV ①	150	-	150	8290A040	8290A083
2	2	66	IV ①	150	-	135	8290A042	8290A085
90 mm Operator								
NORMALLY CLOSED (Entry under disc)								
1	1	19	60	150	240	150	8290A011	8290A054
1 1/4	1 1/4	36	60	150	180	150	8290A017	8290A060
1 1/2	1 1/2	45	60	150	120	120	8290A021	8290A064
2	2	66	60	150	90	90	8290A025	8290A068
NORMALLY OPEN (Entry under disc)								
1	1	19	V ①	150	240	150	8290A029	8290A072
1 1/4	1 1/4	36	V ①	150	240	150	8290A031	8290A074
1 1/2	1 1/2	45	V ①	150	240	150	8290A033	8290A076
2	2	66	V ①	150	240	150	8290A035	8290A078
NORMALLY CLOSED (Entry above disc) - Rapid Cycling Steam Applications								
1 1/4	1 1/4	36	VI ①	150	-	145	8290A136	8290A137
1 1/2	1 1/2	45	VI ①	150	-	145	8290A041	8290A084
2	2	66	VI ①	150	-	145	8290A043	8290A086

Notes: ① Minimum pilot pressure varies with differential pressure. See graphs with dimensional drawings.

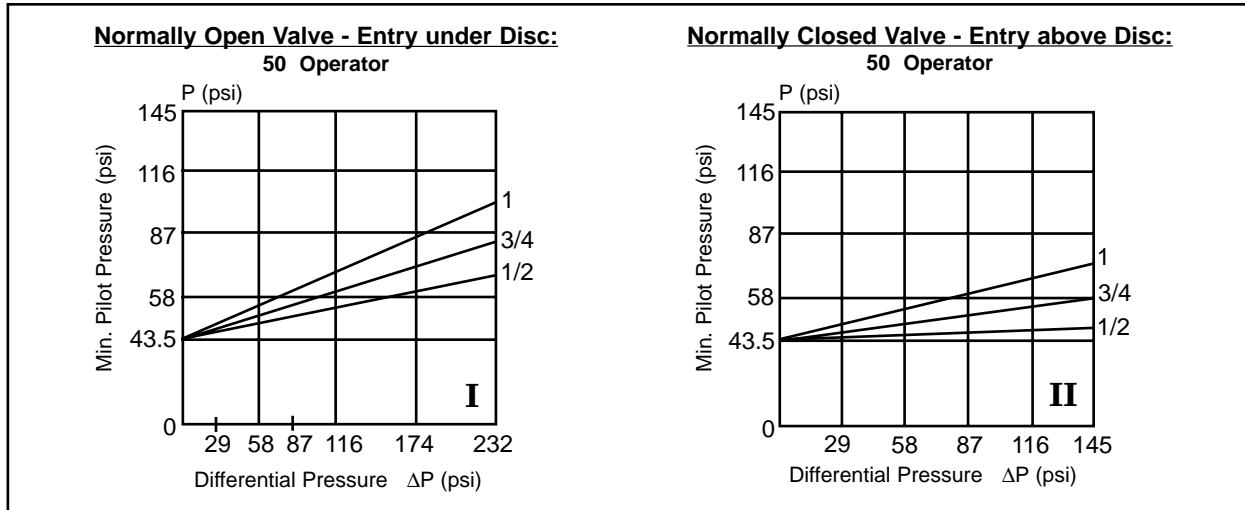
Specifications (Metric units)

Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)	Pilot Pressure (bar)		Maximum Pressure Differential (bar)		Bronze Body	316L Stainless Steel Body
			Min.	Max.	Fluids	Steam	Catalog Number	Catalog Number
50 mm Operator								
NORMALLY CLOSED (Entry under disc)								
1/2	13	4.89	4	10	17	10	8290A384	8290A393
3/4	19	9.43	4	10	10	10	8290A385	8290A394
1	25	12.86	4	10	6	6	8290A386	8290A395
NORMALLY OPEN (Entry under disc) - Pilot Pressure: see graphs, next page								
1/2	13	4.89	I ①	10	17	10	8290A387	8290A396
3/4	19	9.43	I ①	10	17	10	8290A388	8290A397
1	25	12.86	I ①	10	17	10	8290A389	8290A398
NORMALLY CLOSED (Entry above disc) - Rapid Cycling Steam Applications								
1/2	13	4.89	II ①	10	-	10	8290A390	8290A399
3/4	19	9.43	II ①	10	-	10	8290A391	8290A400
1	25	12.86	II ①	10	-	10	8290A392	8290A401
63 mm Operator								
NORMALLY CLOSED (Entry under disc)								
1/2	13	4.89	4	10	17	10	8290A002	8290A045
3/4	19	9.43	4	10	17	10	8290A005	8290A048
1	25	16.29	4	10	10	10	8290A010	8290A053
1 1/4	32	30.86	4	10	6	6	8290A016	8290A059
1 1/2	38	38.57	4	10	4	4	8290A020	8290A063
2	51	56.57	4	10	3	3	8290A024	8290A067
NORMALLY OPEN (Entry under disc)								
1/2	13	4.89	III ①	10	17	10	8290A026	8290A069
3/4	19	9.43	III ①	10	17	10	8290A027	8290A070
1	25	16.29	III ①	10	17	10	8290A028	8290A071
1 1/4	32	30.86	III ①	10	17	10	8290A030	8290A073
1 1/2	38	38.57	III ①	10	11	10	8290A032	8290A075
2	51	56.57	III ①	10	7	7	8290A034	8290A077
NORMALLY CLOSED (Entry above disc) - Rapid Cycling Steam Applications								
1/2	13	4.89	IV ①	10	-	10	8290A036	8290A079
3/4	19	9.43	IV ①	10	-	10	8290A037	8290A080
1	25	16.29	IV ①	10	-	10	8290A038	8290A081
1 1/4	32	30.86	IV ①	10	-	10	8290A039	8290A082
1 1/2	38	38.57	IV ①	10	-	10	8290A040	8290A083
2	51	56.57	IV ①	10	-	9	8290A042	8290A085
90 mm Operator								
NORMALLY CLOSED (Entry under disc)								
1	25	16.29	4	10	17	10	8290A011	8290A054
1 1/4	32	30.86	4	10	12	10	8290A017	8290A060
1 1/2	38	38.57	4	10	8	8	8290A021	8290A064
2	51	56.57	4	10	6	6	8290A025	8290A068
NORMALLY OPEN (Entry under disc)								
1	25	16.29	V ①	10	17	10	8290A029	8290A072
1 1/4	32	30.86	V ①	10	17	10	8290A031	8290A074
1 1/2	38	38.57	V ①	10	17	10	8290A033	8290A076
2	51	56.57	V ①	10	17	10	8290A035	8290A078
NORMALLY CLOSED (Entry above disc) - Rapid Cycling Steam Applications								
1 1/4	32	30.86	VI ①	10	-	10	8290A136	8290A137
1 1/2	38	38.57	VI ①	10	-	10	8290A041	8290A084
2	51	56.57	VI ①	10	-	10	8290A043	8290A086

Notes: ① Minimum pilot pressure varies with differential pressure. See graphs with dimensional drawings.

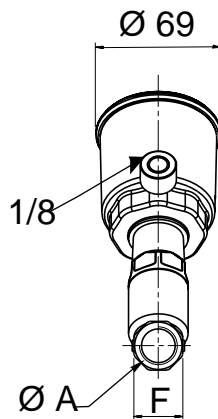
Dimensions: inches (mm)

50 mm Operator Graphs for Steam and Fluids

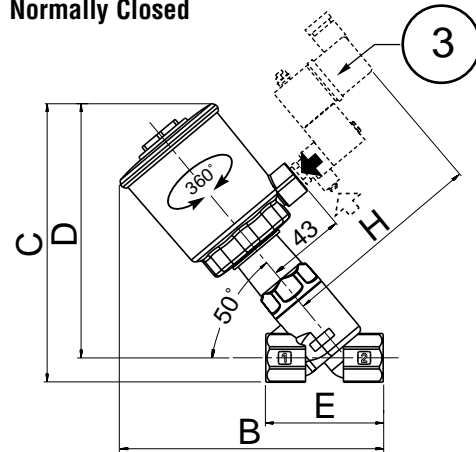


50 Operator								
	ØA	B	C	D	E	F	H	G
ins.	1/2	5.59	6.08	5.55	2.56	1.06	5.75	3.07
mm	12.7	142	154.5	141	65	27	146	78
ins.	3/4	5.92	6.26	5.63	2.95	1.26	5.75	3.07
mm	19.1	150.5	159	143	75	32	146	78
ins.	1	6.10	6.50	5.71	3.54	1.61	5.75	3.07
mm	25.4	155	165	145	90	41	146	78

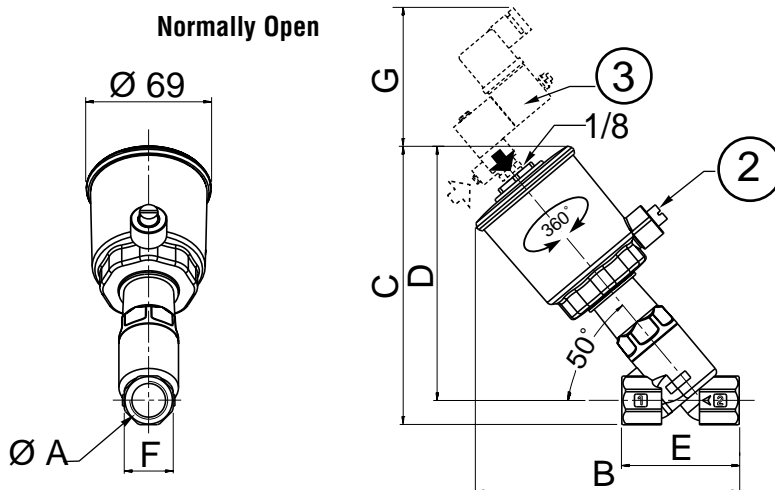
- ② Filter-plug
- ③ Pilot solenoid valve



Normally Closed

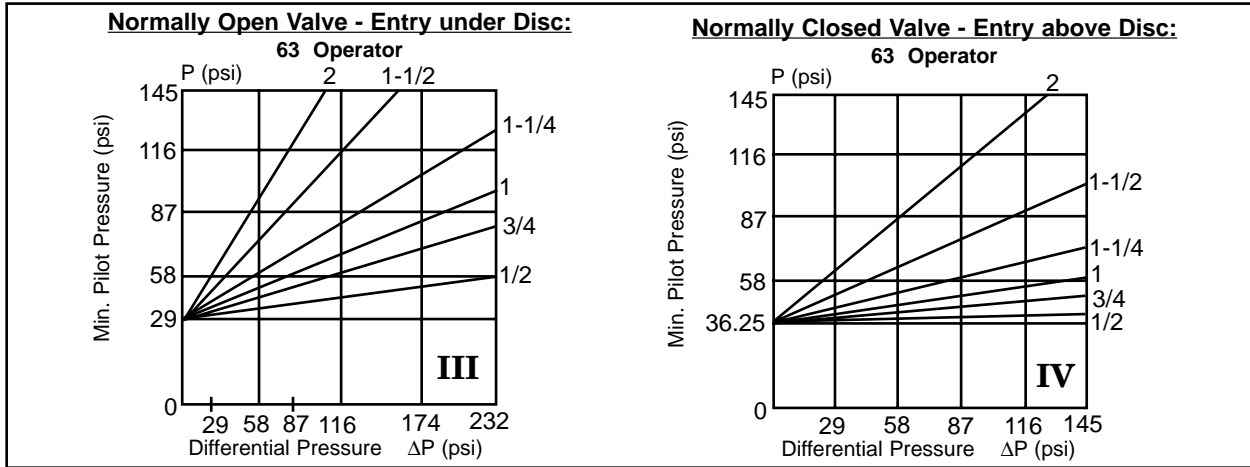


Normally Open

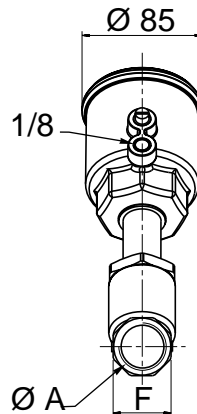


Dimensions: inches (mm)

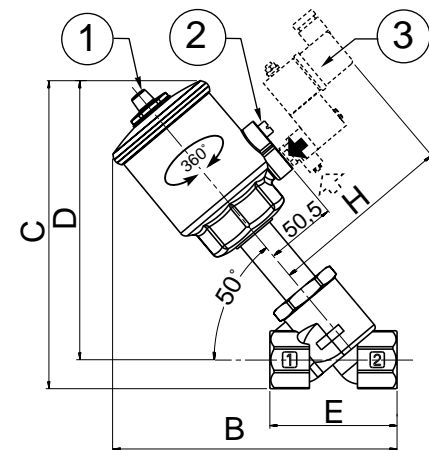
63 mm Operator Graphs for Steam and Fluids



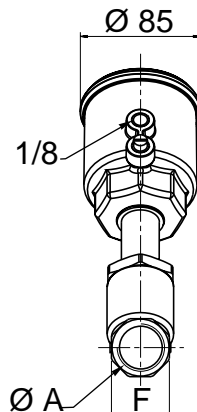
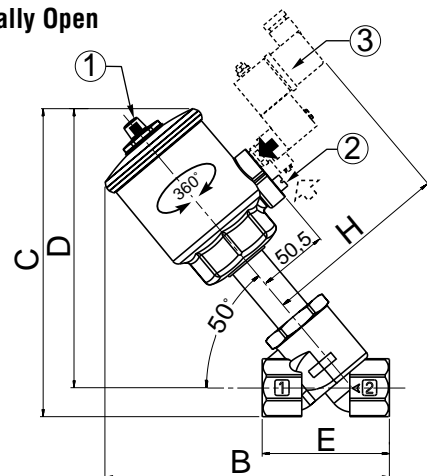
63 Operator							
	ØA	B	C	D	E	F	H
ins.	1/2	7.20	7.36	7.22	2.56	1.06	6.02
mm	12.7	183	197	183.5	65	27	153
ins.	3/4	7.52	8.07	7.44	2.95	1.26	6.02
mm	19.1	191	205	189	75	32	153
ins.	1	7.68	8.46	7.65	3.54	1.61	6.02
mm	25.4	198	215	194.5	90	41	153
ins.	1 1/4	8.54	9.01	8.03	4.33	1.97	6.02
mm	31.8	217	229	204	110	50	153
ins.	1 1/2	8.82	9.64	8.46	4.72	2.36	6.02
mm	38.1	224	245	215	120	60	153
ins.	2	5.87	10.2	8.82	5.9	2.76	6.02
mm	50.8	249	259	224	150	70	153



Normally Closed



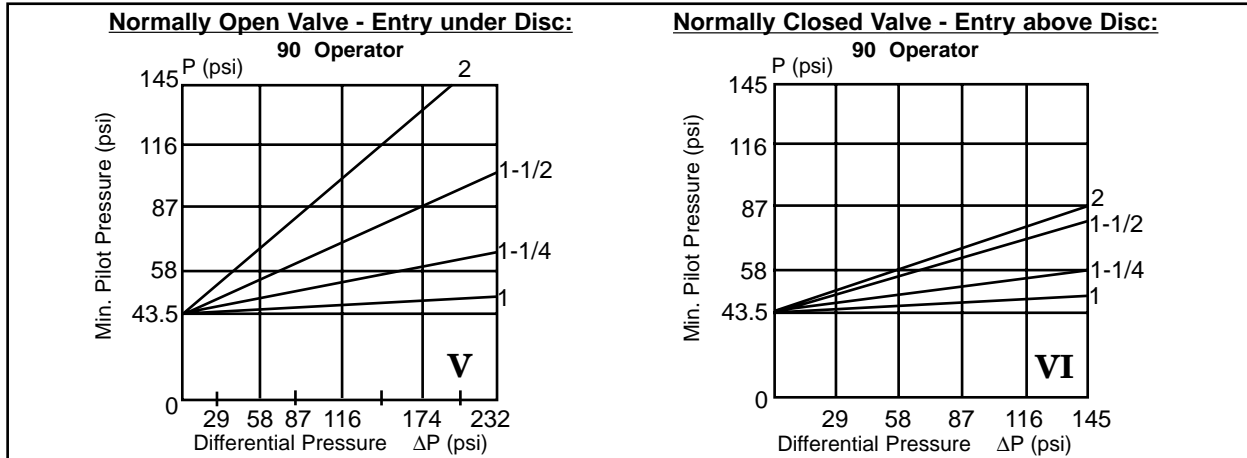
Normally Open



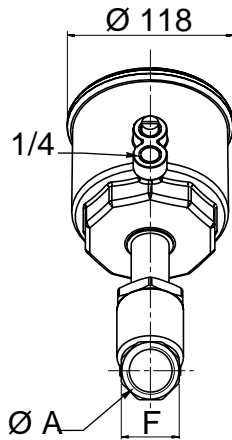
- ① Position Indicator
- ② Filter-plug
- ③ Pilot solenoid valve

Dimensions: inches (mm)

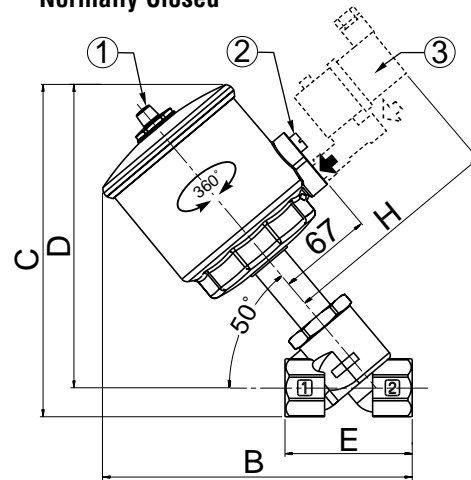
90 mm Operator Graphs for Steam and Fluids



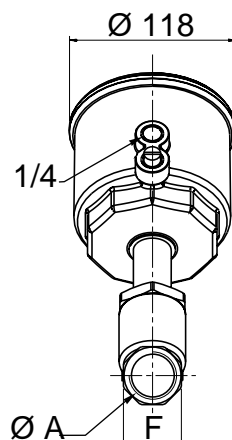
90 Operator							
	ØA	B	C	D	E	F	H
ins.	1	8.62	9.25	8.44	3.54	1.61	6.65
mm	25.4	219	235	214.5	90	41	169
ins.	1 1/4	9.29	9.69	8.70	4.33	1.97	6.65
mm	31.8	236	246	221	110	50	169
ins.	1 1/2	9.57	10.31	9.13	4.72	2.36	6.65
mm	38.1	243	262	232	120	60	169
ins.	2	10.51	10.87	9.49	5.91	2.76	6.65
mm	50.8	267	276	241	150	70	169



Normally Closed



- ① Position Indicator
- ② Filter-plug
- ③ Pilot solenoid valve



Normally Open

