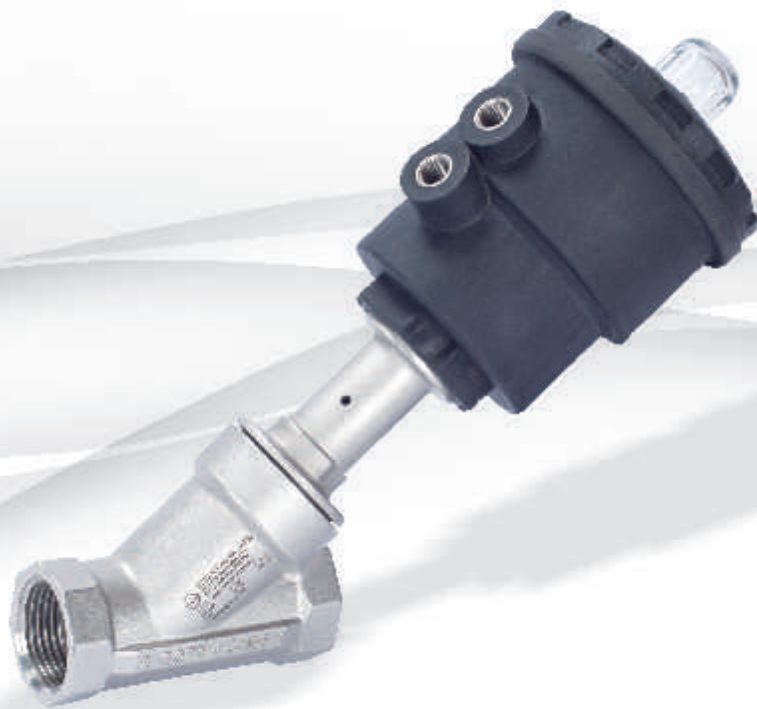


ANGLE SEAT VALVE



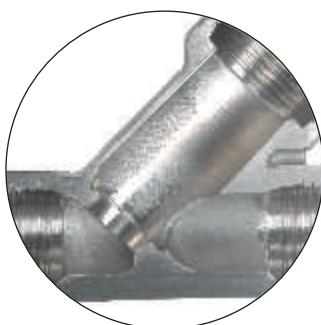
Engineering For The Future

FEATURES

- Easy conversion from Single Acting to Double Acting
- Modular Design
- Lubricated pilot Air not required
- Designed to work up to 10^{-6} Torr Vacuum
- Fast acting up to 500 cycle / hour
- Wetted Parts : CF8, SS 304. Optionally same can be provided with CF3M & SS316L
- SS inserts for operator port
- Operation Life > 3 Million cycles
- Pressurisation of spring chamber in case of single acting operator using appropriate 5/2 valve
- Quick operation of valve possible using appropriate 5/2 valve



- Self aligning plug ensures zero leak for every operation



- Smooth profile with minimum bend for higher flow



- Burnished valve stem with unique PTFE gland packing for lower friction, smoother operation and longer life
- No maintenance due to self loaded V Packing



- Designed to avoid metal to metal contact, by use of longer sleeve accommodating more gland packings, also resulting in better protection against leak
- Rugged gland packing for media and pilot air

ANGLE SEAT VALVE DOUBLE ACTING UNIVERSAL

FEATURES

- NC / NO / Bi Directional Operation
- Modular Design
- Lubricated pilot Air not required
- Designed to work up to 10^{-6} Torr Vacuum
- Fast acting up to 1,000 cycle / hour
- Wetted parts : CF8, SS 304. Optionally same can be provided with CF3M & SS 316 L
- Operation Life > 3 Million cycles
- SS inserts for operator port



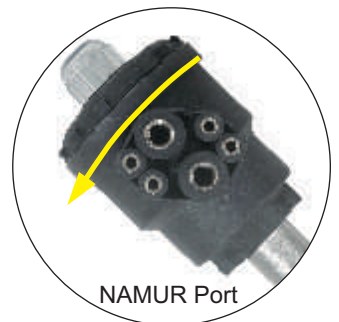
- Aluminium hard anodized piston
- Stationary seal, Seals Aluminium piston
- Low friction
- Longer life



- Transparent indicating dome for valve open visual indication
- Indicator dome can be replaced by limit switch or positioner or stroke limiter



- Operator can be rotated 360°
- Ideally suited for area in which contamination due to exhaust air and sedimentation of particles in the operator crevices are not desired
- Corrosion resistive glass filled Nylon operator



- Operator can be rotated 360°
- Corrosion resistive glass filled Nylon operator
- Ease of mounting Solenoid Valve

FEATURES

- Can be adapted to Double/ Single Acting Angle Seat Valve
- Auto tuning
- User Friendly Setting
- Input power 24V DC, Signal 4-20 mA/ 0-5V/ 0-10V
- Position feedback output 4-20 mA/ 0-5V
- Suitable for Pilot Pressure 2-8 bar
- Close loop controller
- Emergency Shut off signal



ORDERING CODE

- Select VL14 from accessories table
(Refer pages 17, 21, 25)

ANGLE SEAT VALVE WITH ELECTRONIC POSITIONER

FEATURES

- Can be adapted to Double/ Single Acting Angle Seat Valve
- Prominent Visual LED indicator in 10 steps for indication of valve opening from 0 to 100%
- User Friendly Setting
- LED indication for manual AUTO mode
- Input Power 24V DC, Signal 4-20 mA
- Suitable for Pilot Pressure 2-8 bar
- Open loop controller



ORDERING CODE

- Select VL15 from accessories table
(Refer pages 17, 21, 25)

FEATURES

- Ideal for Normally Closed Angle Seat Valve
- Can sense full open position of the valve
- Potential free feedback from SPDT, Micro Switch rating 3A AC, 0.5A DC

Refer to page 9 for more details



ORDERING CODE

- Select PSSA50 or PSSA63 or PSSA 90 or PSSA110 from accessories table
(Refer pages 17, 21, 25)

ANGLE SEAT VALVE WITH VALVE POSITION SENSOR

FEATURES

- Metallic Aluminum Cast Epoxy Powder coated enclosure having IP67 protection,
- Dual cable entry for possibility to terminate solenoid in the junction box and having one cable in to limit switch box
- Up to two sensors each for Open and Close position of the valve
- For ease of cabling, Limit Switch Box Can be rotated 360°
- Sensing element : Micro Switch, WP/ Ex ia, Proximity Switch

Refer to page 10 for more details



ORDERING CODE

- Select LS21 or LS41 or LS22 or LS42 or LS23 or LS43 from accessories table
(Refer pages 17, 21, 25)

SPECIFICATION

• Valve type	Angle Seat Valve
• Function	Single Acting/ Double Acting
• Action	NC/ NO/ Bi-Directional
• Operating Pressure	0 - 16 bar/ 0 - 25 bar
• Size	1/2" 3/4", 1", 1 1/4", 1 1/2", 2" having inline body ports and inclined stem 2 1/2", 3" having inline body ports and perpendicular stem
• Material Body, Stem and Seat Seat, Seal Operator	CF8, SS304 (optional CF3M, SS316L) PTFE, NBR (optional PEEK, VITON) Corrosion resistive glass filled Nylon
• Surface Finish	< 3.2 micron, Electro polished
• Port Connection	Threaded/ Socket Weld end/ Triclamp/ ANSI Flange/ Pipe weld
• Media	Steam, Air, Oil, Water, Fuel Gas and Liquid, Vacuum
• Fluid Temperature	-10 °C to +180 °C with A (PTFE, NBR, Seat, Seal)
• Optionally	-10 °C to +220 °C with (PEEK, VITON, Seat, Seal) (S17)
• Pilot Pressure	0.8 - 10 bar (Refer Pages 12 to 23)
• Ambient Temperature	-10 °C to +60 °C
• Pilot Fluid	Air, Inert Gas filtered to 50 micron
• Operator	SS insert for port and Solenoid valve mounting

APPLICATION

Air Drying Equipment, Autoclave, Bottling and Dispensing Equipment, Chemical and Petrochemical Industries, Coolant Control for Machine Tool, Formulation machine, Fuel, Ink and Paint dispensing, Industrial Compressor, Laundry equipment, Nuclear energy, Pollution Control equipment, Process Control application, Power generation, Paper and Pulp Industries, PSA Plants, Pharmaceutical, Steam, Sterilizer, Textile Dyeing and Drying.

PRESSURE TEMPERATURE CHART

Angle Seat Valve intended to be installed in an area where PED is applicable, the valve should be connected to a lower fluid pressure as indicated in the table hereunder or as mentioned in the operating parameter table on pages 12, 14, 18, 22

DN	Class	Maximum Fluid Pressure kg/cm²					PED Applicable
		-10 °C To Room Temp.	50 °C	100 °C	150 °C	200 °C	
12	B40	≤25	≤25	≤25	≤25	≤25	Not Applicable
20	B40	≤25	≤25	≤25	≤25	≤25	Not Applicable
25	B40	≤25	≤25	≤25	≤25	≤25	Not Applicable
32	B25	24.5	23.2	20.8	19.0	17.6	Yes
40	B20	19.6	19.0	16.7	15.2	14.1	Yes
50	B25	24.5	23.7	20.8	19.6	17.6	Yes
65	B40	≤25	≤25	≤25	≤25	≤25	Yes
80	B40	≤15	≤15	≤15	≤15	≤15	Yes

STROKE LIMITER

FEATURES

- Ideal for application demanding preset flow adjustment
- Can be retrofitted at site
- Adjust stroke for Valve opening from 0% to 100%
- Can be adapted to Single/ Double acting Angle Seat Valve

SPECIFICATION

- Stainless Steel SS304 bolt

ORDERING CODE

SL50	Stroke Limiter For 50 Dia Operator
SL63	Stroke Limiter For 63 Dia Operator
SL90	Stroke Limiter For 90 Dia Operator
SL110	Stroke Limiter For 110 Dia Operator



POSITION SENSOR FOR SINGLE ACTING NORMALLY CLOSED VALVE

FEATURES

- Can be retrofitted at site
- Can be installed on single acting Normally Closed valve function F1 or F6

SPECIFICATION

- Positioning Sensor for single acting valve
- **Type** : PSSA
 - **Ambient Temperature** : -10 °C to 60 °C
 - **Element type** : Micro Switch rating 3Amp
 - **Cable entry** : Suitable for 9 mm OD cable
 - **Contact** : SPDT

ORDERING CODE

PSSA 50	Suitable for Ø50 operator F1, or F6
PSSA 63	Suitable for Ø63 operator, Function F1 or F6
PSSA 90	Suitable for Ø90 operator, Function F1 or F6
PSSA 110	Suitable for Ø110 operator, Function F1 or F6



POSITION SENSOR BOX (Should be ordered along with Valve)

FEATURES

- Adjustable Sensing elements
- Suitable for Single/ Double acting valve

SPECIFICATION

- **Enclosure Material** : Aluminum cast WP/ Ex ia, Powder Coated, IP67
- **Sensing Element** : Micro Switch/ Proximity Sensor
- **Cable Entry** : 2 X M25 X 1.5



SENSING ELEMENT

Model	LS-21	LS-41
Make	Honey well	
No.	2 nos. (One each for Open & Close position)	4 nos. (Two each for Open & Close position)
Type of Element	Micro switch	
Rating	5 Amp AC, 0.5 Amp DC	

Model	LS-23	LS-43
Make	Pepperl+Fuchs	
No.	2 nos. (One each for Open & Close position)	4 nos. (Two each for Open & Close position)
Type of Element	Proximity switch	
Rating	10-60V, 100mA, NO	

Model	LS-22	LS-42
Make	Pepperl+Fuchs	
No.	2 nos. (One each for Open & Close position)	4 nos. (Two each for Open & Close position)
Type of Element	Proximity switch (EEx ia) NJ2-V3-N	
Rating	8V DC, 3mA, NC	

ANGLE SEAT VALVE ACCESSORIES

SOLENOID VALVE (Can be ordered Separately)

APPROVALS



SPECIFICATION (Refer pages 16, 20 & 24 for Solenoid Valve code)

VALVE

- **Pressure** : 10 bar
- **Port connection** : 1/4" BSP
- **Body Material** : Aluminum hard Anodised
- **Seat Seal** : NBR

SOLENOID

- **Voltage Current** : 24V DC, 110V 50-60 Hz, 230V 50-60 Hz
- **Power** : 8W/ 2W/ 1W
- **Protection** : Weather Proof IP67
Explosion Proof Ex d, Ex ia, Ex e mb, IIC T6, IP67
- **Cable Entry** : Pg 9, M20X1.5, 1/2" NPT, M25X1.5

	VALVE TYPE	POWER	FUNCTION		PORT CONNECTION		WEATHER PROOF, IP67			EXPLOSION PROOF IIC, IP 66/ IP67				
			F1/F2/F6	F4	STANDARD P1	NAMUR P2	PLUG IN	PLUG IN	TERMINAL BOX	Ex d		Ex ia		Ex e mb
														
	05	5	✓		✓	✓		✓						
	04	8	✓		✓	✓	✓		✓	✓	✓			✓
	17	8	✓		✓	✓	✓		✓	✓	✓			✓
	18	2	✓		✓	✓	✓		✓	✓	✓			✓
	19	1	✓		✓	✓						✓	✓	
	06	8		✓	✓	✓	✓		✓	✓	✓			✓
	13	2		✓	✓	✓	✓		✓	✓	✓			✓
	14	1		✓	✓	✓						✓	✓	
	07	8		✓	✓	✓	✓		✓	✓	✓			✓
	15	2		✓	✓	✓	✓		✓	✓	✓			✓
	16	1		✓	✓	✓						✓	✓	
	01	8	✓			✓	✓		✓	✓	✓			✓
	02	8	✓	✓		✓	✓		✓	✓	✓			✓
	08	2	✓	✓		✓	✓		✓	✓	✓			✓
	11	1	✓	✓		✓						✓	✓	
	03	8	✓	✓		✓	✓		✓	✓	✓			✓
	09	2	✓	✓		✓	✓		✓	✓	✓			✓
	12	1	✓	✓		✓						✓	✓	

VALVE TYPE	BASIC MODEL
01	30106
02	51424
03	57450
04	30125

VALVE TYPE	BASIC MODEL
05	305
06	51440
07	57440
08	51424LW

VALVE TYPE	BASIC MODEL
09	57450LW
10	51424IS
11	57450IS
12	51440LW

VALVE TYPE	BASIC MODEL
13	51440IS
14	57440LW
15	57440IS
16	31119

VALVE TYPE	BASIC MODEL
17	31119LW
18	31119IS

OPERATING PARAMETERS

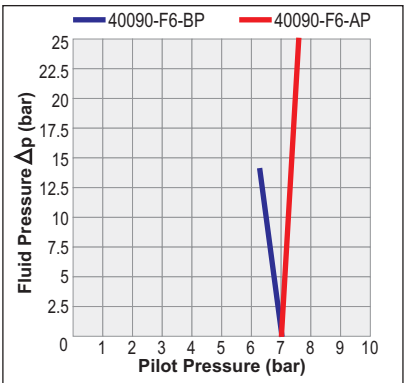
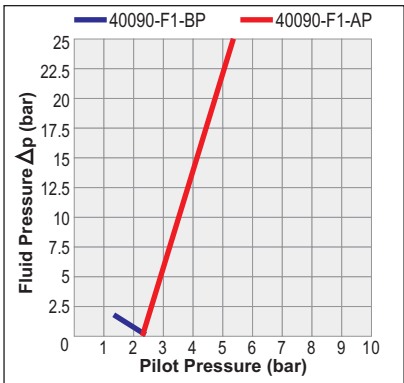
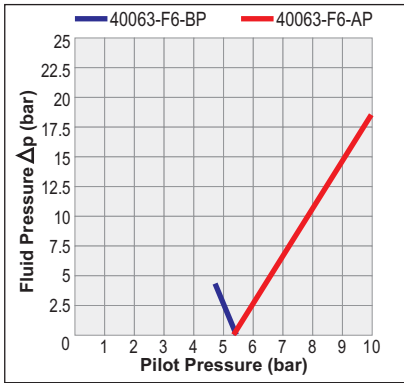
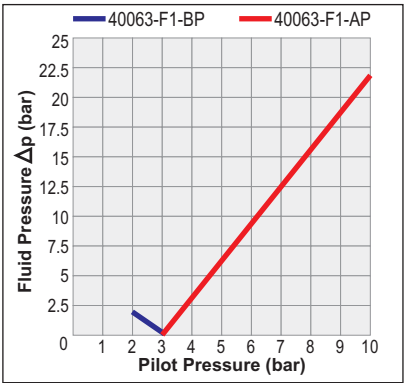
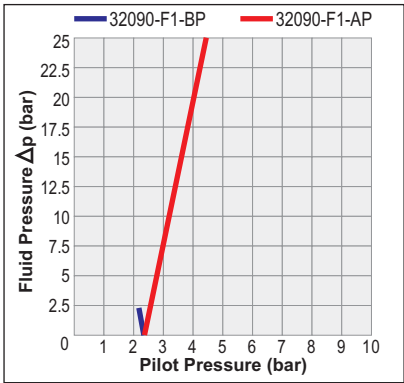
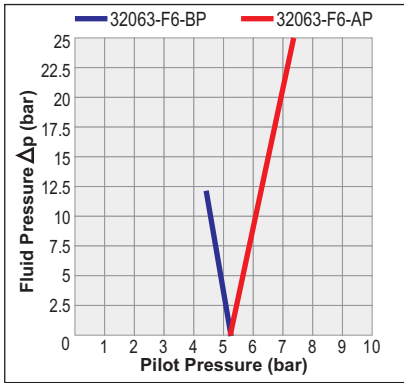
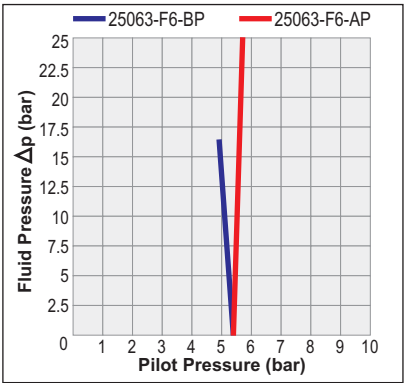
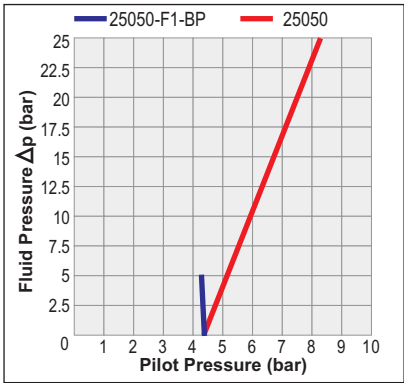
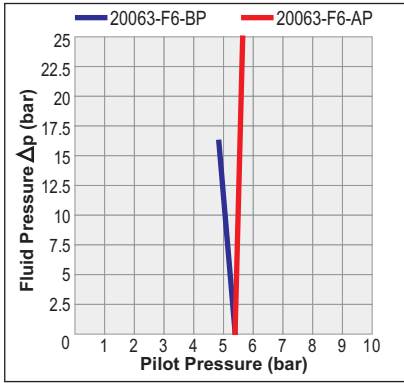
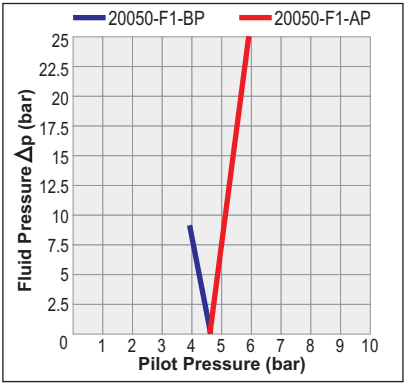
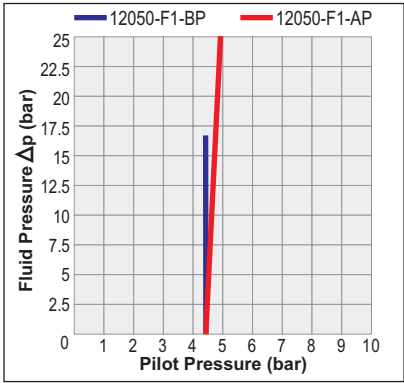
DN Operator	Function	DN	Actuator Ø	Connection	Kv m³/h	Single Acting Normally Closed Bi-Directional					
						Pressure Above Plug			Pressure below Plug		
						Pilot Pressure	Fluid Pressure (bar)		Pilot Pressure	Fluid Pressure (bar)	
							Up to 10 bar	AV, AW, AP, AF #300		AK, AF #150	Up to 10 bar
12050V01	F1	12	50	1/2"	5.8	4.4	0	0	4.4	0	0
						5	16	16	4.4	16	16
						5.4	25		4.4	25	
20050V01	F1	20	50	3/4"	10.8	4.6	0	0	4.6	0	0
						5.5	16	16	4	8	8
						6	25				
20063V01	F6	20	63	3/4"	10.8	5.4	0	0	5.4	0	0
						5.6	16	16	4.9	16	16
						5.7	25		4.4	25	
25050V01	F1	25	50	1"	21	4.3	0	0	4.3	0	0
						6.8	16	16	4.2	5	5
						8.2	25				
25063V01	F6	25	63	1"	21	5.4	0	0	5.4	0	0
						5.6	16	16	4.9	16	16
						5.8	25				
32063V01	F6	32	63	1 1/4"	31	5.2	0	0	5.2	0	0
						6.2	12	16	4.4	12	12
						7.3	25				
32090V02	F1	32	90	1 1/4"	31	2.2	0	0	2.2	0	0
						3.6	16	16	2.2	2	2
						4.4	25				
40063V01	F1	40	63	1 1/2"	49	3	0	0	3	0	0
						8.2	16	16	2	2	2
						10	21				
40063V01	F6	40	63	1 1/2"	49	5.4	0	0	5.4	0	0
						8.4	12	12	4.8	4	4
						10	18				
40090V02	F1	40	110	1 1/2"	49	2.3	0	0	2.3	0	0
						4.2	16	16	1.4	1.4	1.4
						5.3	25				
40090V02	F6	40	110	1 1/2"	49	7	0	0	7	0	0
						7.4	16	16	6.2	14	14
						7.7	25				

- Note :
- For PED certified valves, maximum fluid pressure is limited to minimum value specified in pressure temperature chart on page 8 or table above
 - Valve with F5 function using 5/2 solenoid valve should be replaced by valve with F1 function operated by 5/2 valve
 - Valve with F3 function should be replaced by selecting suitable valve meeting operating parameter of main fluid pressure above, below seat and pilot pressure

ANGLE SEAT VALVE

F1/ F6 SINGLE ACTING NORMALLY CLOSED

OPERATING PARAMETERS



OPERATING PARAMETERS

DN Operator	Function	DN	Actuator Ø	Connection	Kv m³/h	Single Acting Normally Closed Bi-Directional					
						Pressure Above Plug			Pressure below Plug		
						Pilot Pressure	Fluid Pressure (bar)		Pilot Pressure	Fluid Pressure (bar)	
							Up to 10 bar	AV, AW, AP, AF #300		AK, AF #150	Up to 10 bar
50063V01	F1	50	63	2"	68	2.8	0	0			
						7.6	10	10			
						10	14	14			
50090V02	F1	50	63	2"	68	2.3	0	0			
						5.8	16	16			
						7.8	25				
50090V02	F6	50	63	2"	68	6	0	0	6	0	0
						6.8	14	16	2.6	6	6
						7.5	25				
50110V01	F1	50	63	2"	68	1.4	0	0			
						4.2	16	16			
						5.8	25				
50110V01	F6	50	63	2"	68	6	0	0	6	0	0
						6.6	16	16	5.4	12	12
						6.9	25				
65090V02	F1	65	90	21/2"	120	2.2	0	0			
						8.5	12	12			
						10	14				
65110V01	F1	65	110	21/2"	120	1.4	0	0			
						6	16	16			
						8.6	25				
65110V01	F6	65	110	21/2"	120	4.2	0	0	4.2	0	0
						7.2	12	12	2.2	5	5
						10	23				
80110V01	F1	80	110	3"	185	1.6	0	0			
						6.6	10	10			
						10	16				
80110V01	F6	80	110	3"	185	4	0	0	4	0	0
						6.4	8	8	1	4	4
						10	19				

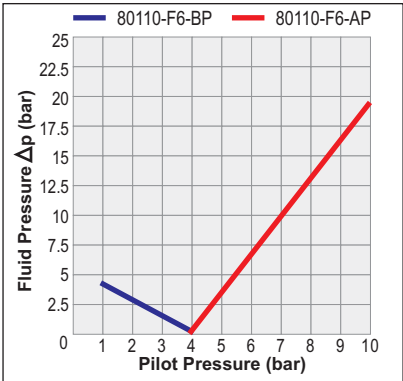
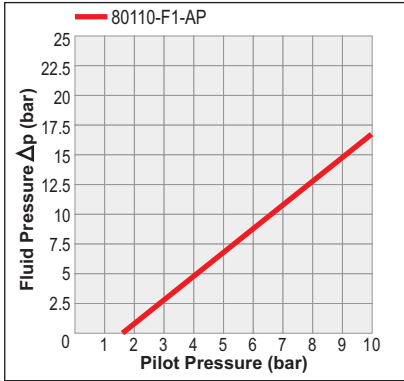
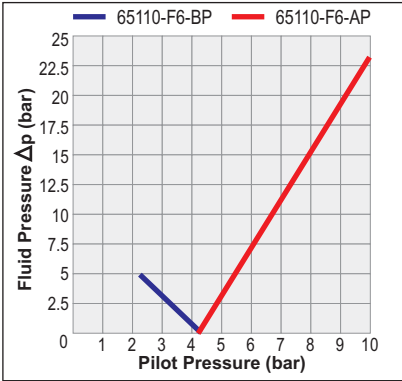
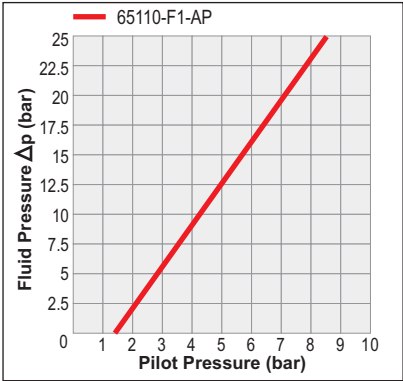
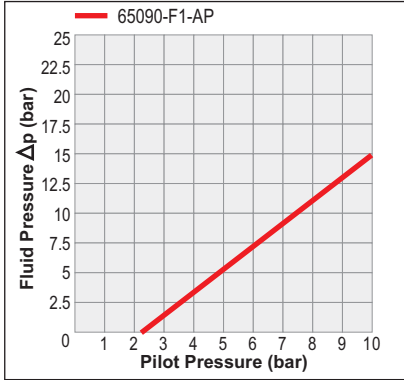
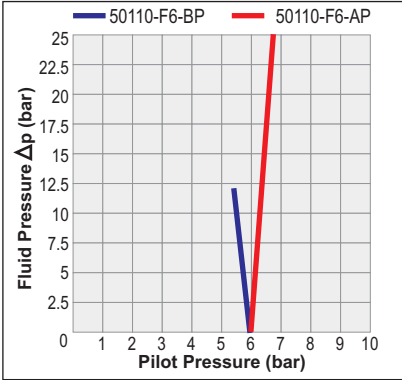
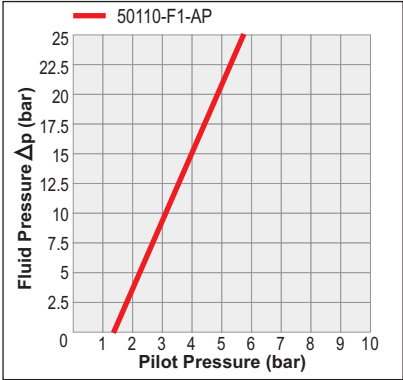
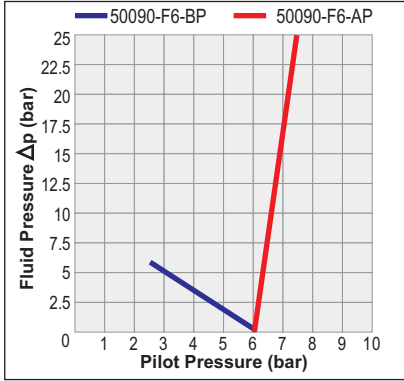
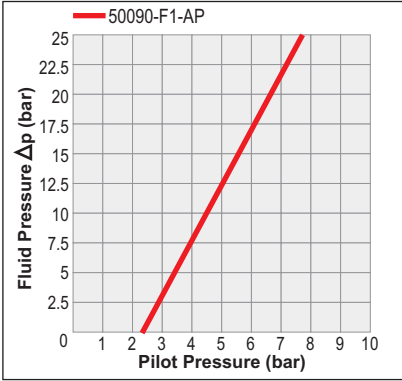
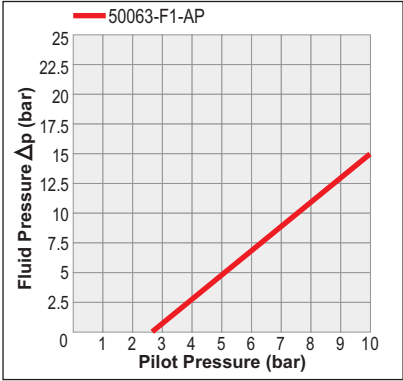
Note :

- 1. For PED certified valves, maximum fluid pressure is limited to minimum value specified in pressure temperature chart on page 8 or table above
- 2. Valve with F5 function using 5/2 solenoid valve should be replaced by valve with F1 function operated by 5/2 port valve
- 3. Valve with F3 function should be replaced by selecting suitable valve meeting operating parameter of main fluid pressure above, below seat and pilot pressure

ANGLE SEAT VALVE

F1/ F6 SINGLE ACTING NORMALLY CLOSED

OPERATING PARAMETERS



ORDERING CODE

1	2	3	4	5	6	7	8	9
PORT TYPE	DN-OPERATOR	FUNCTION	PILOT	SEAL SEAT	PORT CONNECTION	BODY	SOLENOID VALVE	ACESSORIES
AV	12050V01	F1	P1	S17	4G	B12	02 37 C	PSSA50

1		2-3							
PORT TYPE		DN-OPERATOR-FUNCTION							
CODE	DESCRIPTION	DN OPERATOR -FUNCTION	DN	OPERATOR	INLET	DN OPERATOR -FUNCTION	DN	OPERATOR	INLET
③ AV	Clean Port	12050V01-F1	12	50	Bi-Directional	50063V01-F1	50	63	Above Plug
③ AF	Flanged ANSI # 150	20050V01-F1	20	50	Bi-Directional	50090V02-F1	50	90	Above Plug
③ AF300	Flanged ANSI # 300	20063V01-F6	20	63	Bi-Directional	50090V02-F6	50	90	Bi-Directional
③ AW	Weld Neck	25050V01-F1	25	50	Bi-Directional	50110V01-F1	50	110	Above Plug
③ AP	Pipe Weld	25063V01-F6	25	63	Bi-Directional	50110V01-F6	50	110	Bi-Directional
③ APM	Pipe Weld ISO1127	32063V01-F6	32	63	Bi-Directional	65090V02-F1	65	90	Above Plug
③ AK	Tri Clamp	32090V02-F1	32	63	Bi-Directional	65110V01-F1	65	110	Above Plug
② IV	Inline Threaded	40063V01-F1	40	63	Bi-Directional	65110V01-F6	65	110	Bi-Directional
② IF	Inline Flanged # 150	40063V01-F6	40	63	Bi-Directional	80110V01-F1	80	110	Above Plug
② IF300	Inline Flanged # 300	40090V02-F1	40	90	Bi-Directional	80110V01-F6	80	110	Bi-Directional
		40090V02-F6	40	90	Bi-Directional				

4	5	6	7
PILOT	SEAL/ SEAT	④ PORT CONNECTION	BODY
CODE DESCRIPTION	CODE SEAL SEAT	SIZE BSP NPT SIZE BSP NPT	CODE DESCRIPTION
P1 Clean Port	① × NBR PTFE	1/2" 4G 4R 11/2" 12G 12R	① × CF8 (SS304)
P2 NAMUR	S17 VITON PEEK	3/4" 6G 6R 2" 16G 16R	B12 CF3M (SS316L)
		1" 8G 8R 21/2" 20G 20R	
		11/4" 10G 10R 3" 24G 24R	

8									
SOLENOID VALVE (A B C) Refer to page 11 for more details									
A			B				C		
CODE	VALVE MODEL		CODE	COIL CODE			CODE	VOLTAGE	
① ✖	Solenoid Valve Not Required		① ✖	Solenoid Valve Not Required			① ✖	Solenoid Valve Not Required	
01	3/2 NAMUR Type 30106			Weather Proof IP67			A	24V DC, 8 WATT	
02	5/2 3/2 Convertible Single Solenoid NAMUR Type 51424		22	Plug In as per DIN 43650B			B	230V 50Hz, 6 WATT	
03	5/2 3/2 Convertible Double Solenoid NAMUR Type 57450		22S	Plug In as per DIN 43650B			C	110V 50Hz, 6 WATT	
04	3/2 Body Ported Type 30125		⑥ 16	Coil With Integral Terminal Box, Cable Entry M20 X1.5			⑦ D	24V DC, 2 WATT	
05	3/2 Direct Mount Type 305			Explosion Proof IP67			E	24V DC Ex ia	
⑦ 08	5/2 3/2 Convertible Single Solenoid NAMUR Low Power Type 51424LW2		39	Ex d, IIC, T4, Cable Entry M20 X 1.5					
⑦ 09	5/2 3/2 Convertible Double Solenoid Low Power NAMUR Type 57450LW2		37	Ex d, IIC, T4, Cable Entry 1/2" NPT (F)					
⑧ 11	5/2 3/2 Convertible Single Solenoid NAMUR Valve With Intrinsically Safe Coil Type 51424IS		⑥ 87MS	Ex d, IIC, T6, IIC, T6, Cable Entry M20X1.5					
			⑥ 58MS	Ex e mb, IIC, T6, Cable Entry M20X1.5					
			⑧ 65CR	Ex ia IIC, T6, Plug In as per DIN 43650A					
			⑧ 67MS	Ex ia, Integral Terminal Box, IIC, T6, Cable Entry M20 X 1.5					
⑧ 12	5/2 3/2 Convertible Double Solenoid NAMUR Valve With Intrinsically Safe Coil Type 57450IS		⑥ 66MS	Ex ia, IIC, T6, With Booster Circuit, Integral Terminal Box, Cable Entry M20 X 1.5					

Note : Contact Rotex for ordering code of solenoid valve having approval other than 

ORDERING EXAMPLE (Solenoid Valve)

- 01 22 A >>> 3/2 NAMUR valve type 01 (basic model 30106), Aluminum Body, 1/4" BSP, with 24V DC DIN plug, IP67 coil
- 12 67NS E >>> 5/2, 3/2 Convertible Double Solenoid NAMUR valve type 12 (basic model 57450IS) Aluminum Body, 1/4" Port, with Intrinsically Safe, Ex ia IIC T6, IP67 Solenoid
- 08 37 D >>> 5/2 3/2 Convertible Single Solenoid NAMUR valve type 08 (basic model 51424) Aluminum Body, 1/4" BSP, with Explosion Proof Ex d IIC T6, IP67 Coil

ANGLE SEAT VALVE

F1/ F6 SINGLE ACTING NORMALLY CLOSED

ORDERING CODE

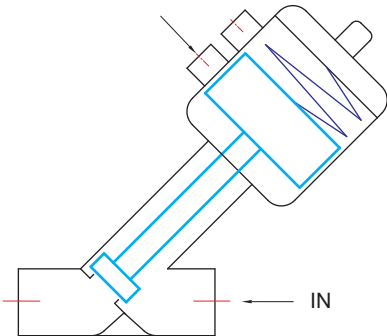
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ACCESSORIES (refer to page 9 & 10 for more details)		Sensing Element Qty.	
CODE	DESCRIPTION	OPEN	CLOSE
① ×	Transparent Indicating Dome	Nil	Nil
PSSA50	Microswitch SPDT, 3 AMP, NO/NC for Operator 50	One	Nil
PSSA63	Microswitch, SPDT, 3 AMP, NO/NC for Operator 63	One	Nil
PSSA90	Microswitch, SPDT, 3 AMP, NO/NC for Operator 90	One	Nil
PSSA110	Microswitch, SPDT, 3, AMP, NO/NC for Operator 110	One	Nil
SL50	Stroke Limiter for Operator 50		
SL63	Stroke Limiter for Operator 63		
SL90	Stroke Limiter for Operator 90		
SL110	Stroke Limiter for Operator 110		
LS21	Microswitch, 5 AMP AC, 0.5 AMP DC, SPDT, Make : Honeywell	One	One
LS41	Microswitch, 5 AMP AC, 0.5 AMP DC, SPDT, Make : Honeywell	Two	Two
LS22	Proximity Switch EEx ia, Type NJ2-V3-N, 8V DC, 3 mA, NC, Make: PEPPERL + FUCHS	One	One
LS42	Proximity Switch EEx ia, Type NJ2-V3-N, 8V DC, 3 mA, NC, Make: PEPPERL + FUCHS	Two	Two
LS23	Proximity Switch Weather Proof, 10V - 60V, 100 mA, NO	One	One
LS43	Proximity Switch Weather Proof, 10V - 60V, 100 mA, NO	Two	Two
⑨ VL14	Intelligent Positioner		
⑨ VL15	Electronic Positioner		

Note

- ① • Do not specify when opted
- ② • DN Operator can be 65090/ 65110/ 80110
- ③ • DN Operator can be other than 65090/ 65110/ 80110
- ④ • Should be opted only for port type AV & IV
- ⑤ • Solenoid valve type 31119/ 51400 cannot be fitted on Valve
- ⑥ • For 1/2" NPT Cable Entry, replace 16/ 87MS/ 58MS/ 67MS/ 66MS with 19/ 87NS/ 58NS/ 67NS/ 66NS
- ⑦ • Valve type 08 & 09 can be supplied with coil voltage type D only
- ⑧ • Valve type 11 & 12 can be supplied with coil code 65CR/ 67MS/ 67NS only
- ⑨ • Solenoid valve should not be opted

RECOMMENDED INSTALLATION

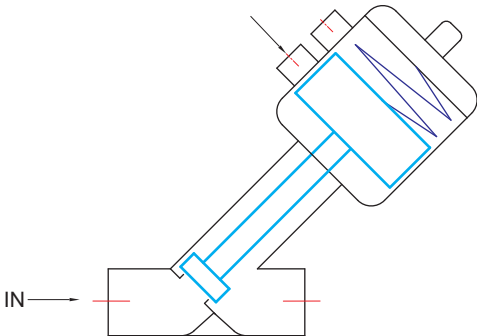
PRESSURE ABOVE SEAT



MEDIA

Gas, Steam, Air, Vacuum, LPG

PRESSURE BELOW SEAT



MEDIA

Gas, Air, Water, Vacuum, Oil, Liquid, Fuel

ORDERING EXAMPLE

AV25050V01-F1-P1-4G

25NB Single Acting Normally Closed Angle Seat valve having 1" BSP port connection, PTFE seat, Body and Wetted part CF8, SS304 and Operator 50, Clean port, seals and O ring NBR

AV40090V02-F6-P2-S17-12R-B12-08 16MS D-PSSA90

40NB Single Acting Normally Closed Angle Seat Valve having 1 1/2" NPT threaded port connection, PEEK Seat, Body and wetted parts CF3M, SS316L, Operator 90 NAMUR Ports, Seals and O ring VITON, along with Position Sensor Type PSSA90 having Cable entry PG9, SPDT Micro switch 3 AMP for sensing Open Position of the valve, with 5/2 3/2 Convertible Low Power Solenoid Valve, Body Material Aluminum Hard Anodised, Low Power Weather Proof Solenoid having integral Terminals Junction Box, Cable Entry M20X1.5, Voltage 24V DC, Power 2 Watt, Type 0816MSD

OPERATING PARAMETERS

DN Operator	DN	Actuator Ø	Connection	Kv m³/h	Single Acting Normally Open		
					Pressure Below Plug		
					Pilot Pressure	Fluid Pressure (bar)	
						Up to 10 bar	AV, AW, AP, AF #300 AK, AF #150
12050V01	12	50	1/2"	5.8	3.4	0	0
					5.8	16	16
					7.1	25	
20050V01	20	50	3/4"	10.8	3.5	0	0
					5.8	16	16
					7.1	25	
25050V01	25	50	1"	21	4.3	0	0
					6	12	12
					7.8	25	
25063V01	25	63	1"	21	2.8	0	0
					5.6	16	16
					7.2	25	
32063V01	32	63	1 1/4"	31	2.4	0	0
					6.8	16	16
					9.2	25	
40063V01	40	63	1 1/2"	49	3	0	0
					7	10	10
					10	17	
40090V02	40	110	1 1/2"	49	2	0	0
					5.2	16	16
					7	25	
50090V02	50	63	2"	68	2	0	0
					6.7	12	12
					10	20	
50110V01	50	63	2"	68	1.4	0	0
					4.4	16	16
					6.1	25	
65090V02	65	90	2 1/2"	120	1.4	0	0
					5.8	4	4
					10	7.8	
65110V01	65	110	2 1/2"	120	1.6	0	0
					6	12	12
					8.5	25	
80110V01	80	110	3"	185	1.4	0	0
					6.8	8	8
					10	13	

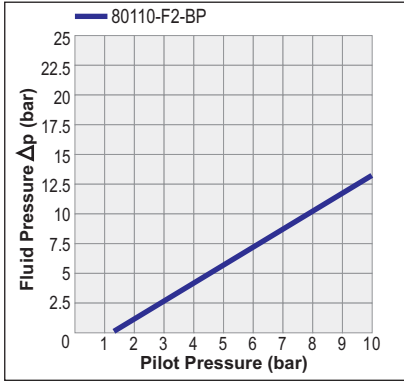
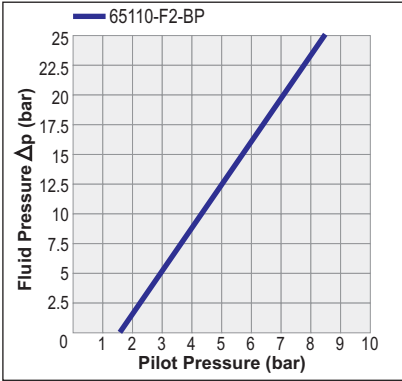
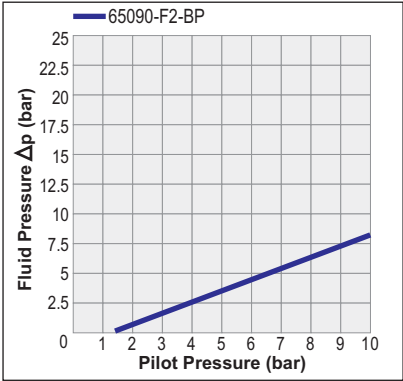
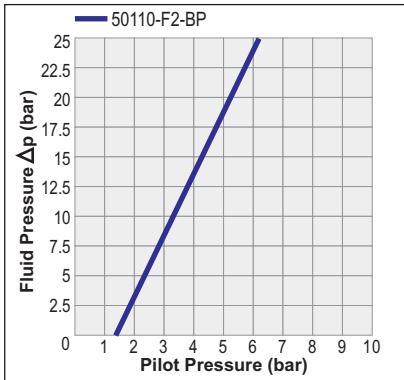
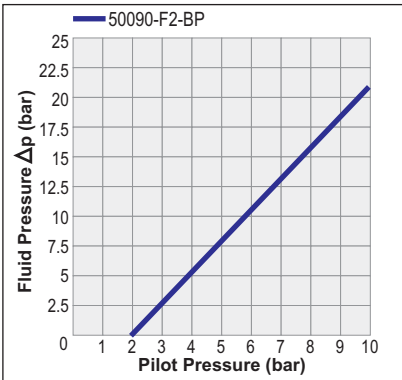
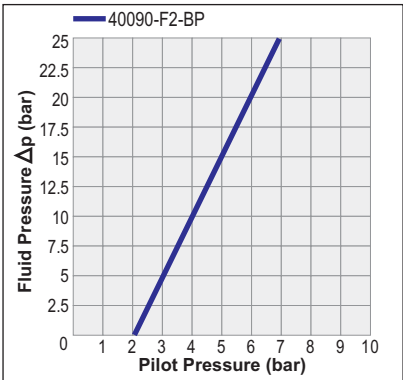
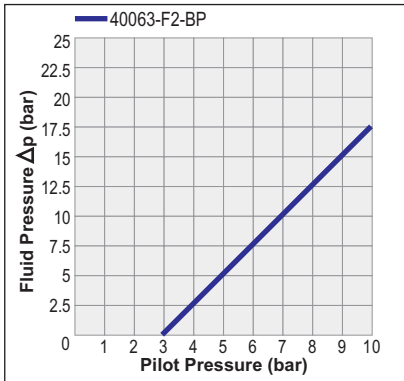
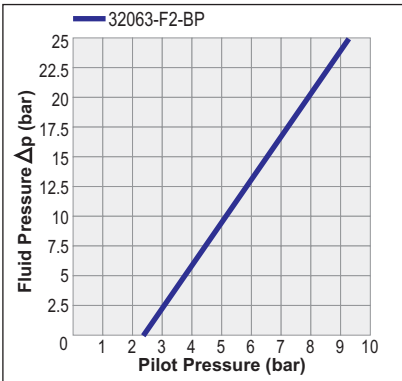
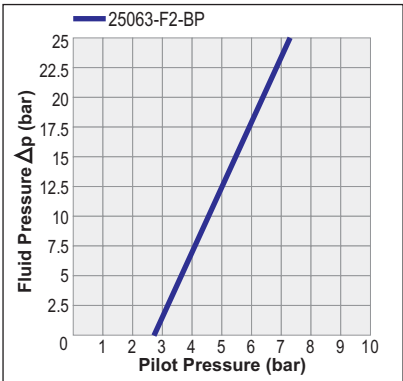
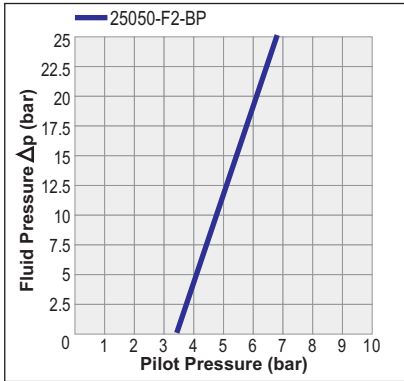
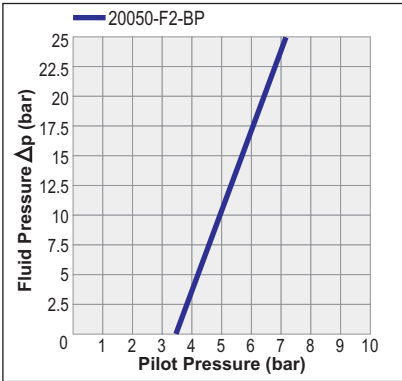
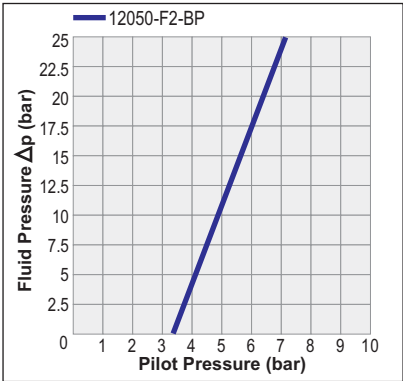
Note : For PED certified valves, maximum fluid pressure is limited to minimum value specified in pressure temperature chart on page 8 or table above

ANGLE SEAT VALVE

F2

SINGLE ACTING NORMALLY OPEN

OPERATING PARAMETERS



ORDERING CODE

Table with 9 columns: 1. PORT TYPE (AF300), 2. DN-OPERATOR (25050V01), 3. FUNCTION (F2), 4. PILOT (P1), 5. SEAL SEAT (S17), 6. PORT CONNECTION, 7. BODY (B12), 8. SOLENOID VALVE (05 22S B), 9. ACCESSORIES (SL50)

Table with 7 sections: 1. PORT TYPE (CODE, DESCRIPTION), 2. DN-OPERATOR (CODE, DN, OPERATOR), 3. FUNCTION (CODE, DESCRIPTION), 4. PILOT (CODE, DESCRIPTION), 5. SEAL/ SEAT (CODE, SEAL, SEAT), 6. PORT CONNECTION (SIZE, BSP, NPT), 7. BODY (CODE, DESCRIPTION)

Table with 3 sections: 8. SOLENOID VALVE (A B C) Refer to page 11 for more details. Section A: VALVE MODEL, Section B: COIL CODE, Section C: VOLTAGE

ORDERING EXAMPLE (Solenoid Valve)

- 01 22 A >>> 3/2 NAMUR valve type 01 (basic model 30106) Aluminum Body, 1/4" BSP, 24V DC with DIN plug coil, IP67
- 12 67NS E >>> 5/2, 3/2 Convertible Double Solenoid NAMUR valve type 12 (basic model 57450IS) Aluminum Body, 1/4" Port, with Intrinsically Safe, Ex ia IIC T6, IP67 Solenoid
- 08 37 D >>> 5/2 3/2 Convertible Single Solenoid NAMUR valve type 08 (basic model 51424) Aluminum Body, 1/4" BSP, with Explosion Proof Ex d IIC T6, IP67 Coil

F2

ANGLE SEAT VALVE

SINGLE ACTING NORMALLY OPEN

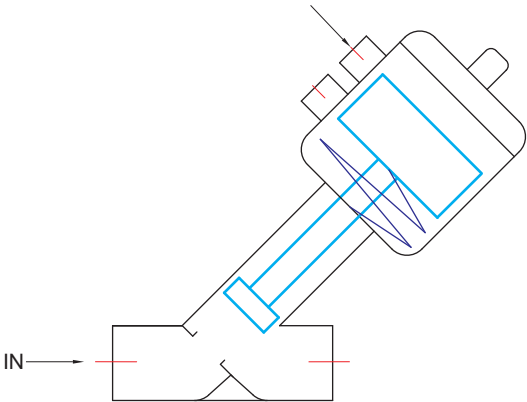
ORDERING CODE

9			
ACCESSORIES (refer to page 9 & 10 for more details)		Sensing Element Qty.	
CODE	DESCRIPTION	OPEN	CLOSE
※	Transparent Indicating Dome		
SL50	Stroke Limiter for Operator 50		
SL63	Stroke Limiter for Operator 63		
SL90	Stroke Limiter for Operator 90		
SL110	Stroke Limiter for Operator 110		
LS21	Microswitch, 5 AMP AC, 0.5 AMP DC, SPDT, Make : Honeywell	One	One
LS41	Microswitch, 5 AMP AC, 0.5 AMP DC, SPDT, Make : Honeywell	Two	Two
LS22	Proximity Switch EEx ia, Type NJ2-V3-N, 8V DC, 3 mA, NC, Make: PEPPERL + FUCHS	One	One
LS42	Proximity Switch EEx ia, Type NJ2-V3-N, 8V DC, 3 mA, NC, Make: PEPPERL + FUCHS	Two	Two
LS23	Proximity Switch Weather Proof, 10V - 60V, 100 mA, NO	One	One
LS43	Proximity Switch Weather Proof, 10V - 60V, 100 mA, NO	Two	Two
⑨ VL14	Intelligent Positioner		
⑨ VL15	Electronic Positioner		

- Note
- ① Do not specify when opted
 - ② DN Operator can be 65090/ 65110/ 80110
 - ③ DN Operator can be other than 65090/ 65110/ 80110
 - ④ Should be opted only for port type AV & IV
 - ⑤ Solenoid valve type 31119/ 51400 cannot be fitted on Valve
 - ⑥ For 1/2" NPT Cable Entry, replace 16/ 87MS/ 58MS/ 67MS/ 66MS with 19/ 87NS/ 58NS/ 67NS/ 66NS
 - ⑦ Valve type 08 & 09 can be supplied with coil voltage type D only
 - ⑧ Valve type 11 & 12 can be supplied with coil code 65CR/ 67MS/ 67NS only
 - ⑨ Solenoid valve should not be opted

CONNECTION DETAIL/ RECOMMENDED INSTALLATION

PRESSURE BELOW SEAT



MEDIA

- Steam, Air, Oil, Water, Fuel Gas and Liquid, Vacuum

ORDERING EXAMPLE

AV50090V02-F2-P1-16G
 50NB Single Acting Normally Open Angle Seat valve having 2" BSP port connection, PTFE seat, Body and wetted part CF8, SS304 and Operator 90, Clean port, seals and O ring NBR

AV40090V02-F2-P2-S17-12R-B12-0237C-SL90
 40NB Single Acting Normally Open Angle Seat Valve having 1 1/2" NPT threaded port connection, PEEK Seat, Body and wetted parts CF3M, SS316L, Operator 90 NAMUR Ports, Seals and O ring VITON, along with Stroke limiter Type SL90 with 5/2 3/2 Convertible NAMUR Solenoid Valve, Body Material Aluminum Hard Anodised, fitted with, Explosion proof solenoid Ex d IIC T6, having cable entry 1/2" NPT, Voltage 110V AC, 6 Watt, Type 0237C

OPERATING PARAMETERS

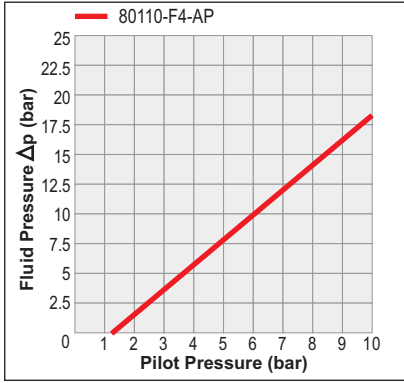
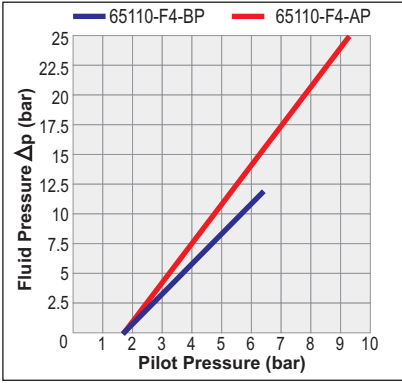
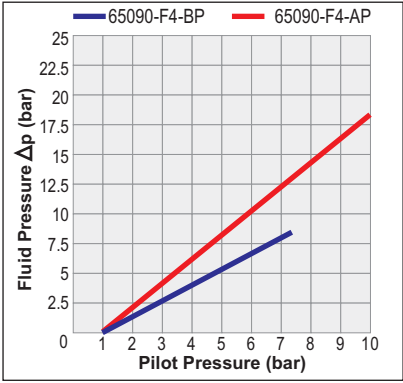
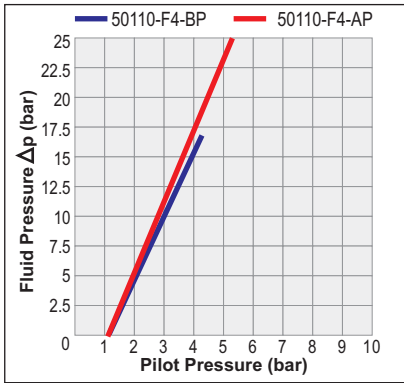
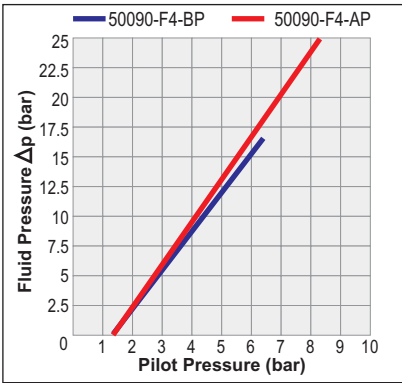
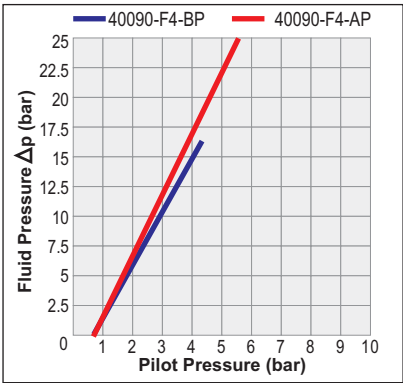
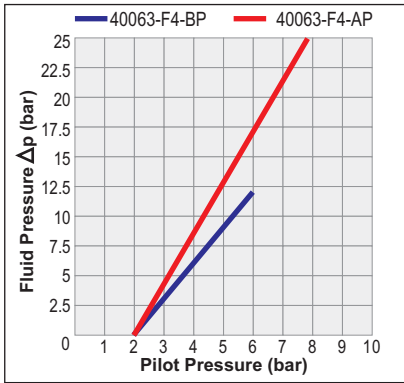
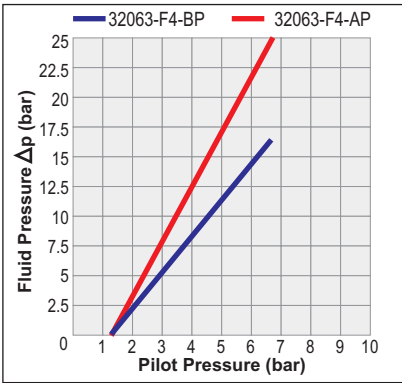
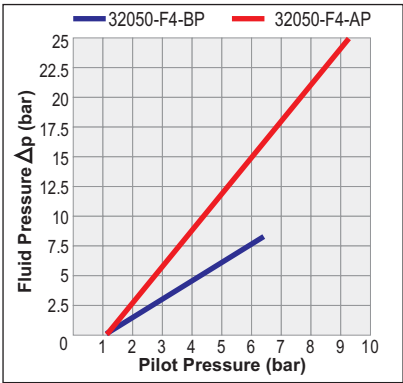
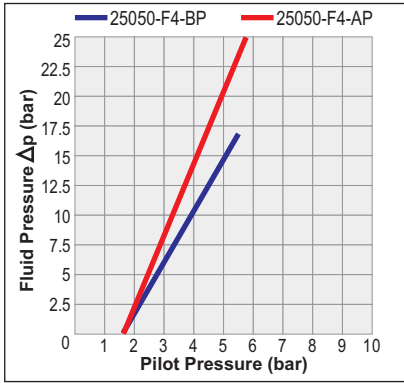
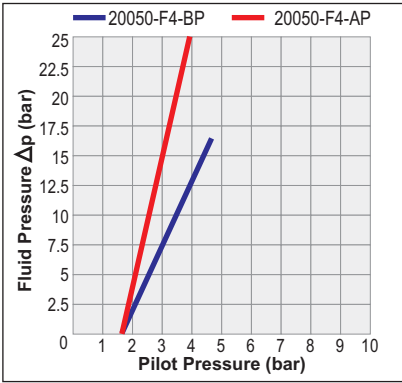
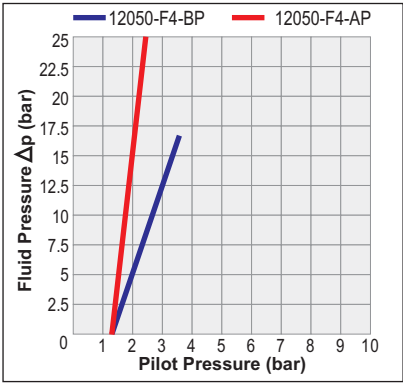
DN Operator	DN	Actuator Ø	Connection	Kv m³/h	Double Acting Bi-Directional Universal					
					Pressure Above Plug			Pressure Below Plug		
					Pilot Pressure	Fluid Pressure		Pilot Pressure	Fluid Pressure	
					Up to 10 bar	AV, AW, AP, AF #300	AK, AF #150	Up to 10 bar	AV, AW, AP, AF #300	AK, AF #150
12050V01	12	50	1/2"	5.8	1.2	0	0	1.2	0	0
					2	16	16	3.4	16	16
					2.5	25				
20050V01	20	50	3/4"	10.8	1.8	0	0	1.8	0	0
					3.2	16	16	4.6	16	16
					4	25				
25050V01	25	50	1"	21	1.8	0	0	1.8	0	0
					4.4	16	16	5.2	16	16
					5.8	25				
32050V01	32	50	1 1/4"	31	1.2	0	0	1.2	0	0
					6.4	16	16	6.2	8	8
					9.2	25				
32063V01	32	63	1 1/4"	31	1.2	0	0	1.2	0	0
					4.8	16	16	6.6	16	16
					6.8	25				
40063V01	40	63	1 1/2"	49	2	0	0	2.0	0	0
					5.8	16	16	6.0	12	12
					7.9	25				
40090V02	40	110	1 1/2"	49	0.8	0	0	0.8	0	0
					3.8	16	16	4.2	16	16
					5.5	25				
50090V02	50	63	2"	68	1.4	0	0	1.4	0	0
					5.8	16	16	6.2	16	16
					8.3	25				
50110V01	50	63	2"	68	1.1	0	0	1.1	0	0
					3.8	16	16	4.0	16	16
65090V02	65	90	2 1/2"	120	1	0	0	1.0	0	0
					7	12	12	7.2	8	2
					10	18	12	12.0		
65110V01	65	110	2 1/2"	120	1.8	0	0	1.8	0	0
					6	14	14	6.6	12	12
					9.2	25				
80110V01	80	110	3"	185	1.3	0	0			
					7	12	12			
					10	18				

Note : For PED certified valves, maximum fluid pressure is limited to minimum value specified in pressure temperature chart on page 8 or table above

ANGLE SEAT VALVE

F4 DOUBLE ACTING BI-DIRECTIONAL UNIVERSAL

OPERATING PARAMETERS



ANGLE SEAT VALVE
DOUBLE ACTING BI-DIRECTIONAL UNIVERSAL F4

ORDERING CODE

1	2	3	4	5	6	7	8	9
PORT TYPE	DN-OPERATOR	FUNCTION	PILOT	SEAL SEAT	PORT CONNECTION	BODY	SOLENOID VALVE	ACESSORIES
AV	12050V01	F4	P2	S17	4G	B12	12 67NS E	LS21

1	2	3
PORT TYPE	DN-OPERATOR	FUNCTION
CODE DESCRIPTION	CODE DN OPERATOR	CODE DESCRIPTION
③ AV Clean Port	12050V01 12 50	F4 DOUBLE ACTING UNIVERSAL
③ AF Flanged ANSI # 150	20050V01 20 50	
③ AF300 Flanged ANSI # 300	25050V01 25 50	
③ AW Weld Neck	32050V01 32 50	
③ AP Pipe Weld	32063V01 32 63	
③ APM Pipe Weld ISO1127	40063V01 40 63	
③ AK Tri Clamp		
② IV Inline Threaded		
② IF Inline Flanged # 150		
② IF300 Inline Flanged # 300		

4	5	6	7
PILOT	SEAL/ SEAT	④ PORT CONNECTION	BODY
CODE DESCRIPTION	CODE SEAL SEAT	SIZE BSP NPT SIZE BSP NPT	CODE DESCRIPTION
P1 Clean Port	① * NBR PTFE	1/2" 4G 4R 11/2" 12G 12R	① * CF8 (SS304)
P2 NAMUR	S17 VITON PEEK	3/4" 6G 6R 2" 16G 16R	B12 CF3M (SS316L)
		1" 8G 8R 21/2" 20G 20R	
		11/4" 10G 10R 3" 24G 24R	

8					
SOLENOID VALVE (A B C) Refer to page 11 for more details					
A		B		C	
CODE VALVE MODEL		CODE COIL CODE		CODE VOLTAGE	
① * Solenoid Valve Not Required		① * Solenoid Valve Not Required		① * Solenoid Valve Not Required	
02 5/2 3/2 Convertible Single Solenoid NAMUR Type 51424		Weather Proof IP67		A 24V DC, 8 WATT	
03 5/2 3/2 Convertible Double Solenoid NAMUR Type 57450		22 Plug In as per DIN 43650B		B 230V 50Hz, 6 WATT	
⑦ 08 5/2 3/2 Convertible Single Solenoid NAMUR Low Power Type 51424LW2		22S Plug In as per DIN 43650B		C 110V 50Hz, 6 WATT	
⑦ 09 5/2 3/2 Convertible Double Solenoid Low Power NAMUR Type 57450LW2		⑥ 16 Coil With Integral Terminal Box, Cable Entry M20 X1.5		⑦ D 24V DC, 2 WATT	
⑧ 11 5/2 3/2 Convertible Single Solenoid NAMUR Valve With Intrinsically Safe Coil Type 51424IS		Explosion Proof IP67		E 24V DC Ex ia	
⑧ 12 5/2 3/2 Convertible Double Solenoid NAMUR Valve With Intrinsically Safe Coil Type 57450IS		39 Ex d, IIC, T4, Cable Entry M20 X 1.5			
		37 Ex d, IIC, T4, Cable Entry 1/2" NPT (F)			
		⑥ 87MS Ex d, IIC, T6, IIC, T6, Cable Entry M20X1.5			
		⑥ 58MS Ex e mb, IIC, T6, Cable Entry M20X1.5			
		⑧ 65CR Ex ia IIC, T6, Plug In as per DIN 43650A			
		⑧ 67MS Ex ia, Integral Terminal Box, IIC, T6, Cable Entry M20 X 1.5			
		⑥ 66MS Ex ia, IIC, T6, With Booster Circuit, Integral Terminal Box, Cable Entry M20 X 1.5			

ORDERING EXAMPLE (Solenoid Valve)

- 02 22 B >>> 5/2 Convertible NAMUR valve type 02 (basic model 51424) Aluminum Body, 1/4" BSP, 230V 50Hz with DIN plug IP67 coil
- 12 67NS E >>> 5/2, 3/2 Convertible Double Solenoid NAMUR valve type 12 (basic model 57450IS) Aluminum Body, 1/4" Port, with Intrinsically Safe, Ex ia IIC T6, IP67 Solenoid
- 08 37 D >>> 5/2 3/2 Convertible Single Solenoid NAMUR valve type 08 (basic model 51424) Aluminum Body, 1/4" BSP, with Explosion Proof Ex d IIC T6, IP67 Coil

ANGLE SEAT VALVE

F4 DOUBLE ACTING BI-DIRECTIONAL UNIVERSAL

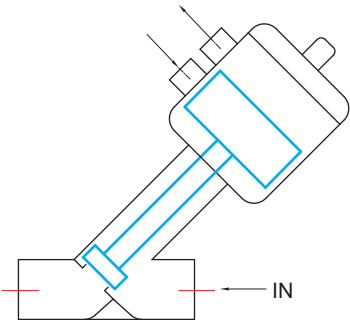
ORDERING CODE

9			
ACCESSORIES (refer to page 9 & 10 for more details)		Sensing Element Qty.	
CODE	DESCRIPTION	OPEN	CLOSE
① ✖	Transparent Indicating Dome		
SL50	Stroke Limiter for Operator 50		
SL63	Stroke Limiter for Operator 63		
SL90	Stroke Limiter for Operator 90		
SL110	Stroke Limiter for Operator 110		
LS21	Microswitch, 5 AMP AC, 0.5 AMP DC, SPDT, Make : Honeywell	One	One
LS41	Microswitch, 5 AMP AC, 0.5 AMP DC, SPDT, Make : Honeywell	Two	Two
LS22	Proximity Switch EEx ia, Type NJ2-V3-N, 8V DC, 3 mA, NC, Make: PEPPERL + FUCHS	One	One
LS42	Proximity Switch EEx ia, Type NJ2-V3-N, 8V DC, 3 mA, NC, Make: PEPPERL + FUCHS	Two	Two
LS23	Proximity Switch Weather Proof, 10V - 60V, 100 mA, NO	One	One
LS43	Proximity Switch Weather Proof, 10V - 60V, 100 mA, NO	Two	Two
⑨ VL14	Intelligent Positioner		
⑨ VL15	Electronic Positioner		

- Note
- ① • Do not specify when opted
 - ② • DN Operator can be 65090/ 65110/ 80110
 - ③ • DN Operator can be other than 65090/ 65110/ 80110
 - ④ • Should be opted only for port type AV & IV
 - ⑤ • Solenoid valve type 31119/ 51400 cannot be fitted on Valve
 - ⑥ • For 1/2" NPT Cable Entry, replace 16/ 87MS/ 58MS/ 67MS/ 66MS with 19/ 87NS/ 58NS/ 67NS/ 66NS
 - ⑦ • Valve type 08 & 09 can be supplied with coil voltage type D only
 - ⑧ • Valve type 11 & 12 can be supplied with coil code 65CR/ 67MS/ 67NS only
 - ⑨ • Solenoid valve should not be opted

CONNECTION DETAIL/ RECOMMENDED INSTALLATION

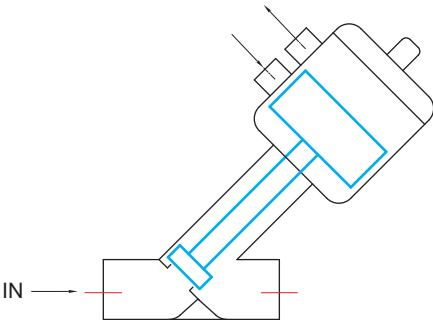
Normally close
Pressure Above Seat



MEDIA

Gas, Steam, Air, Vacuum,
LPG

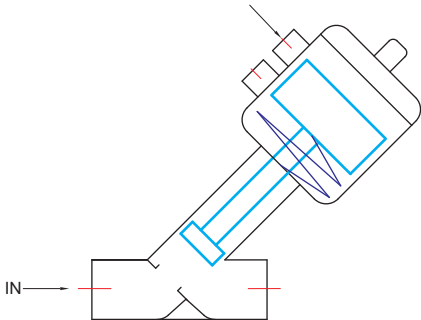
Normally close
Pressure Below Seat



MEDIA

Gas, Air, Water, Vacuum, Oil,
Liquid, Fuel

Normally open
Pressure Below Seat



MEDIA

Steam, Air, Oil, Water, Fuel
Gas and Liquid, Vacuum

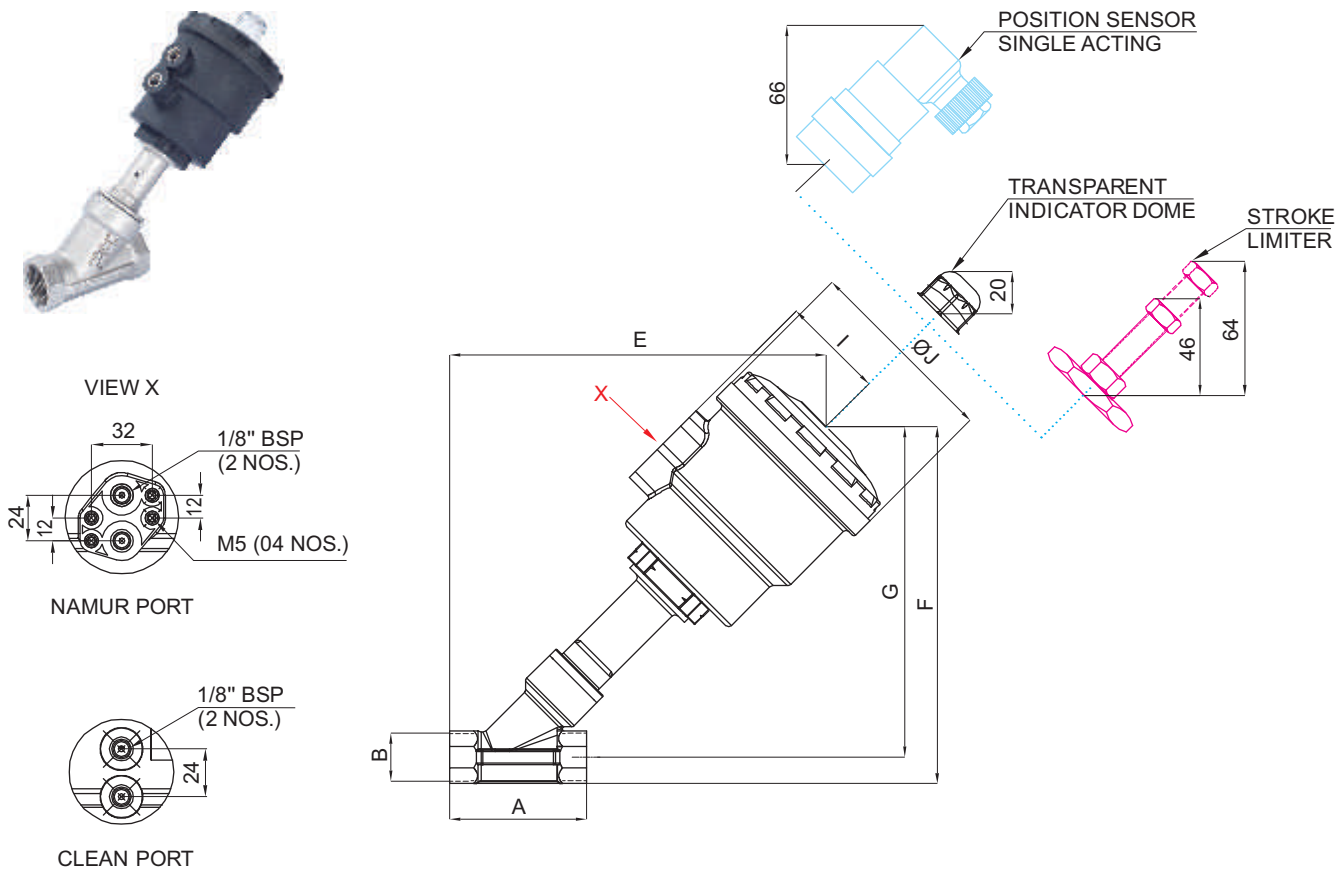
ORDERING EXAMPLE

AV32063V01-F4-P1-16G
 32NB Double Acting Bi-Directional Universal Angle Seat valve having 11/4" BSP port connection, PTFE seat, Body and wetted part CF8, SS304 and Operator 63, Clean port, seals and O ring NBR

AF25050V01-F4-P2-S17-B12-11 67NS E-LS22
 25NB Double Acting Bi-Directional Universal Angle Seat Valve having 25NB RF #150 flanged port connection, PEEK Seat, Body and wetted parts CF3M, SS316L, Operator diameter 50 mm having NAMUR Ports, Seals and O ring VITON, along with position sensor box having Powder coated Aluminum Cast enclosure, One number each Micro Switch, SPDT, 5AMP for AC, 0.5 AMP for DC, to sense Open and Close position of the valve, Cable Entry 2 Number M25 X 1.5 mm Type LS21 with 5/2 3/2 Convertible NAMUR Solenoid Valve with Intrinsically safe Solenoid, Body Material Aluminum Hard Anodised, fitted with, Explosion proof solenoid Ex ia IIC T6, having cable entry 1/2" NPT, Voltage 24V DC, Type 1167NSE

DIMENSIONS

TYPE AV : Threaded ports as per ISO 228/1 and ISO 7/1



(All dimensions are in mm)

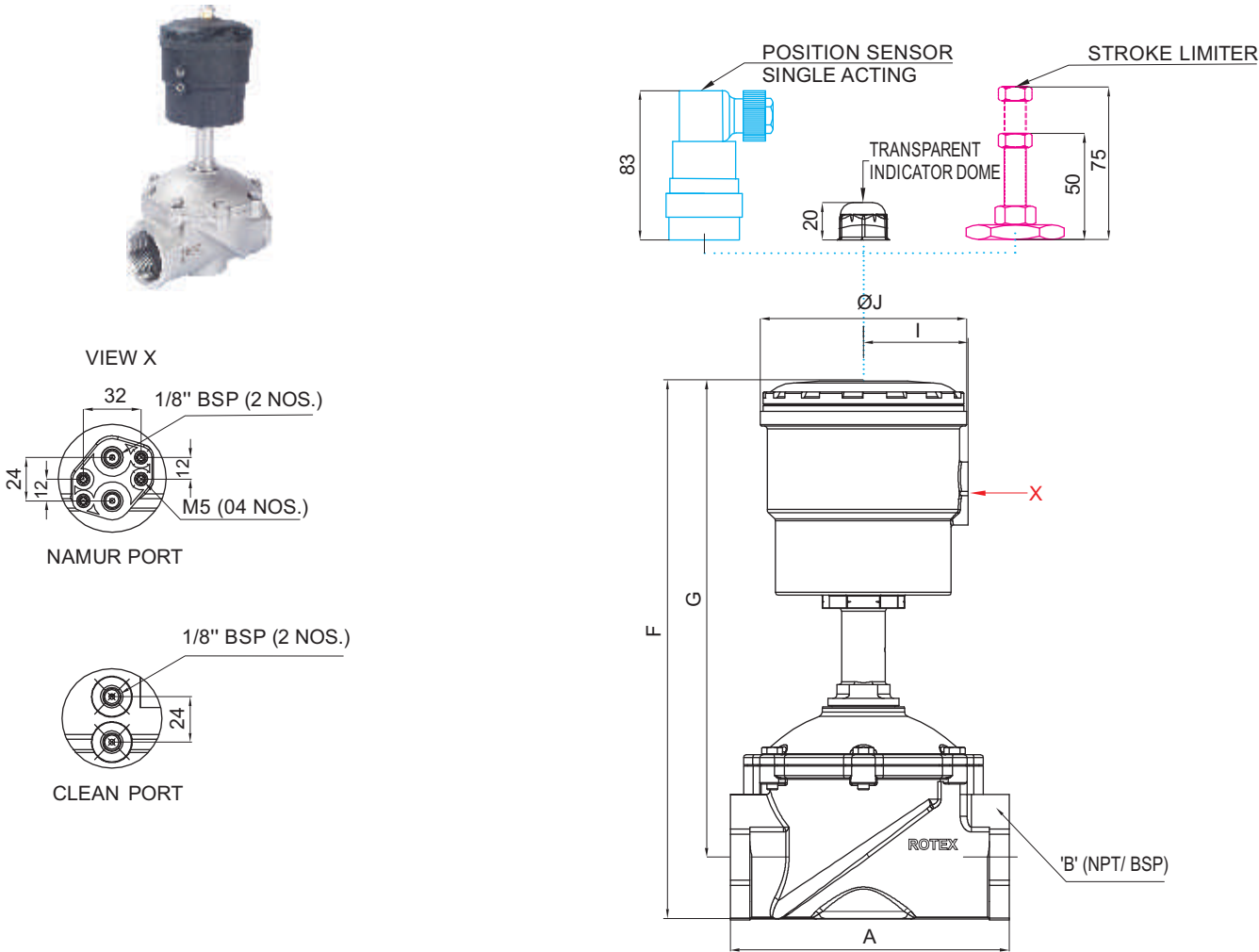
Type	DN	Actuator Ø	A	B BSP/ NPT	E	F	G	ØJ	I	 kg.
AV12050V01	12	50	65	1/2"	167	158	146	75	42	1
AV20050V01	20	50	75	3/4"	171	161	145	75	42	1.1
AV20063V01	10	63	75	3/4"	185	174	158	93	49	1.3
AV25050V01	25	50	90	1"	177	165	145	75	42	1.4
AV25063V01	25	63	90	1"	190	179	158	93	49	1.6
AV32063V01	32	63	110	1 1/4"	200	188	162	93	49	2.1
AV32090V02	32	90	110	1 1/4"	233	220	196	124	67	3.2
AV40063V01	40	63	120	1 1/2"	205	199	169	93	49	2.9
AV40090V02	40	90	120	1 1/2"	235	229	199	124	67	3.9
AV50063V01	50	63	150	2"	233	218	183	93	49	3.6
AV50090V02	50	90	150	2"	263	248	213	124	67	4.3
AV50110V01	50	110	150	2"	283	248	232	148	75	6.3

ANGLE SEAT VALVE

TYPE IV

DIMENSIONS

TYPE IV : Threaded ports as per ISO 228/1 and ISO 7/1

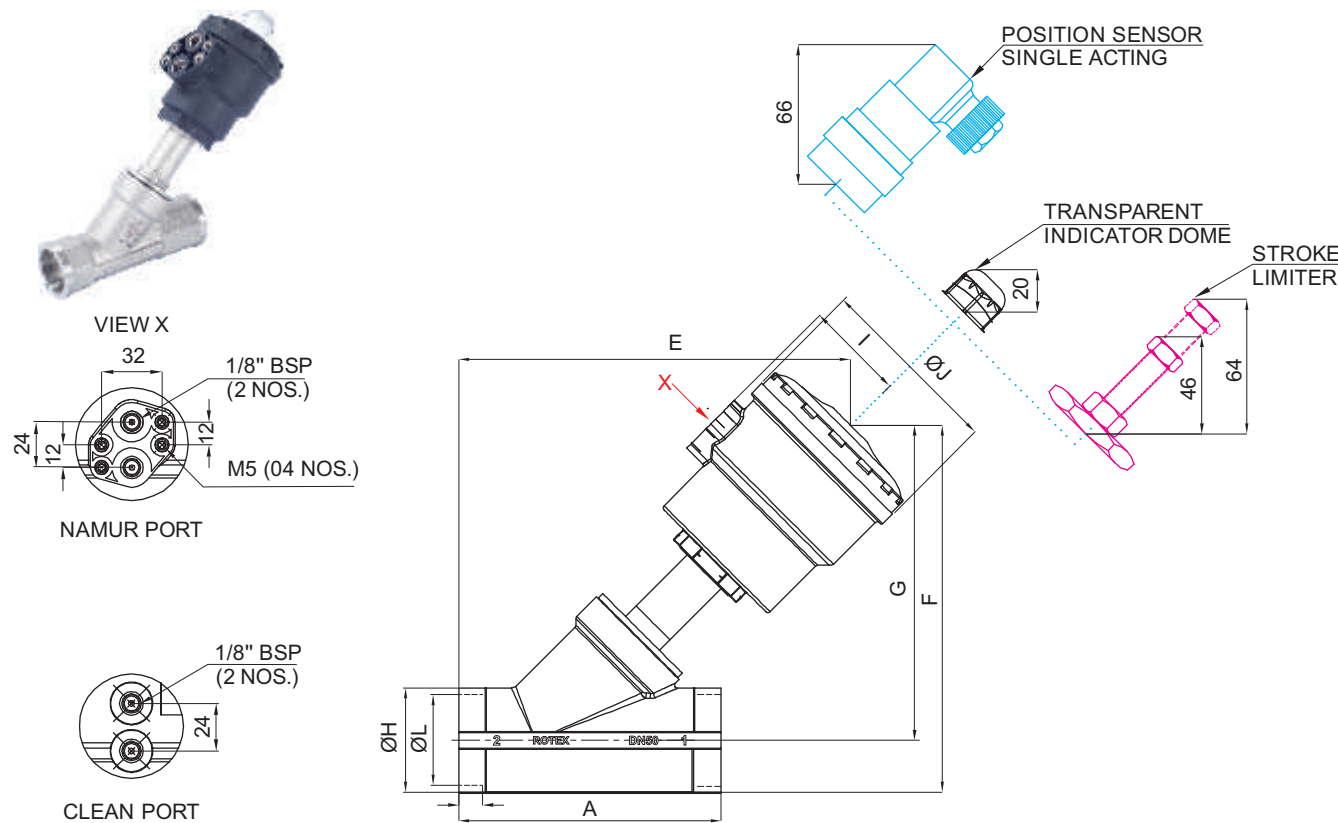


(All dimensions are in mm)

Type	DN	Actuator Ø	A	B BSP/ NPT	F	G	ØJ	I	kg.
IV65090V02	65	90	200	2 1/2"	361	316	124	67	9.1
IV65110V01	65	110	200	2 1/2"	391	316	148	75	10.0
IV80110V01	80	110	235	3"	415	363	148	75	15.3

DIMENSIONS

TYPE AW : Weldneck type ports as per ISO 4200



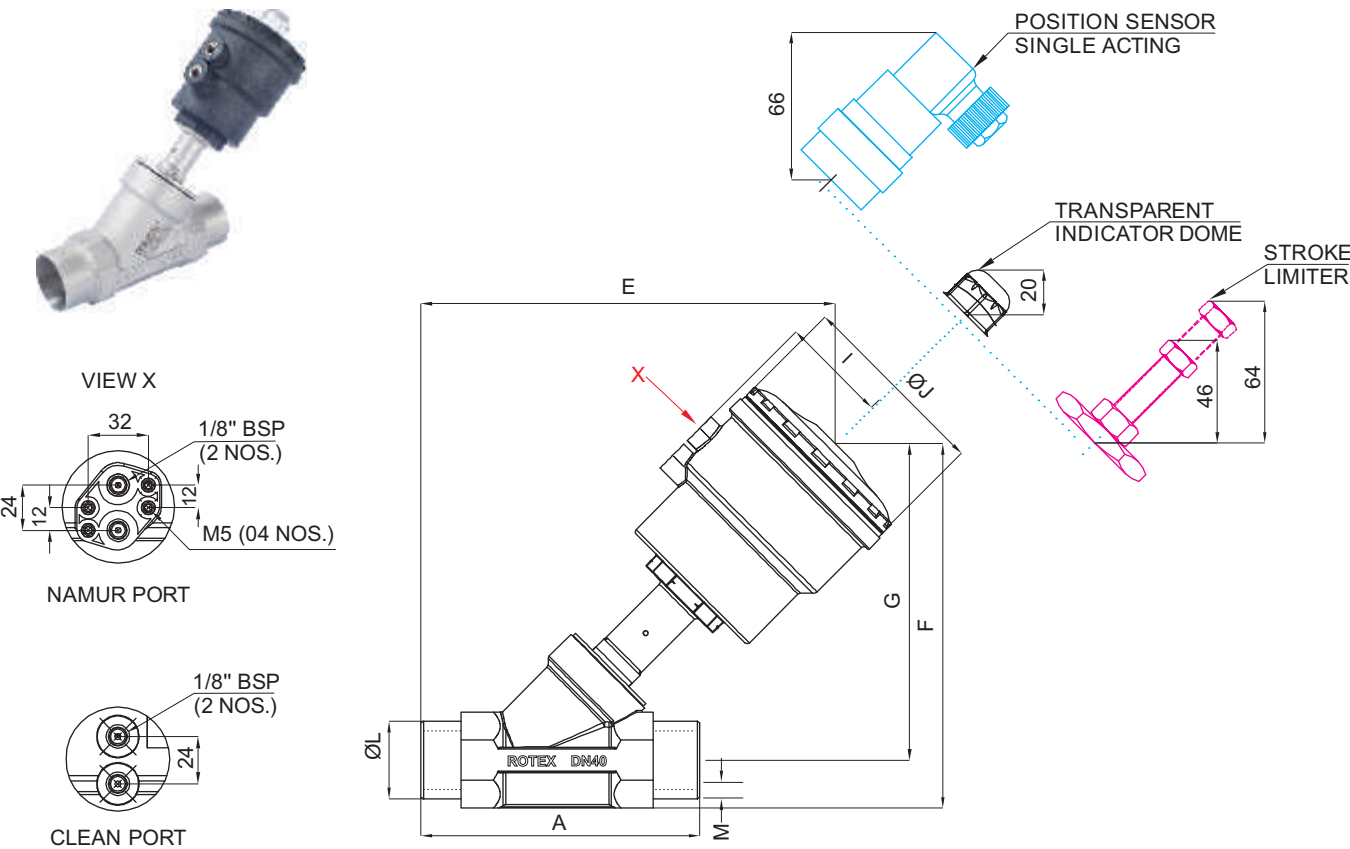
(All dimensions are in mm)

Type	DN	Actuator Ø	A	E	F	G	ØJ	I	ØH	ØL	 kg.
AW12050V01	12	50	100	167	158	146	75	42	24	21.3	1
AW20050V01	20	50	115	171	161	145	75	42	31	26.9	1.1
AW20063V01	20	63	115	185	174	158	93	49	31	26.9	1.5
AW25050V01	25	50	130	177	165	145	75	42	39	33.7	1.4
AW25063V01	25	63	130	190	179	158	93	49	39	33.7	1.6
AW32063V01	32	63	145	200	188	162	93	49	49	42.4	2.1
AW32090V02	32	90	145	233	220	196	124	67	49	42.4	4
AW40063V01	40	63	160	205	199	169	93	49	57	48.3	2.9
AW40090V02	40	90	160	235	229	199	124	67	57	48.3	4.3
AW50063V01	50	63	175	233	218	183	93	49	69	60.3	3.8
AW50090V02	50	90	175	263	248	213	124	67	69	60.3	5.5
AW50110V01	50	110	175	283	248	232	148	75	69	60.3	6.7
IW65090V02	65	90	CONTACT ROTEX								
IW65110V01	65	110									
IW80110V01	80	110									

ANGLE SEAT VALVE
TYPE AP/ APM

DIMENSIONS

TYPE AP : Butt weld for pipe as per ANSI 36.1, B 36.19 Sch 40
TYPE APM : Butt weld for pipe as per ISO 1127

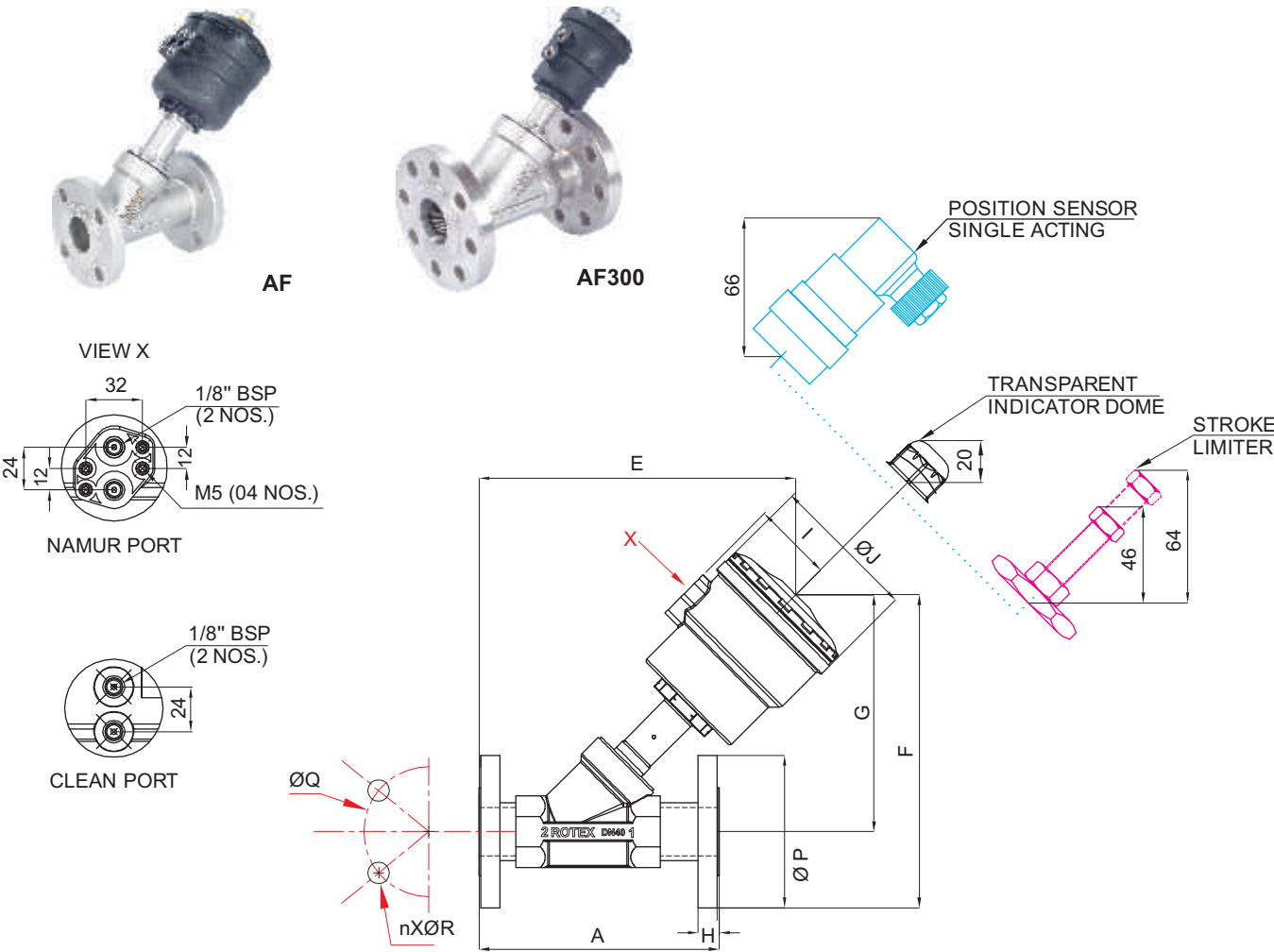


(All dimensions are in mm)

Type	DN	Actuator Ø	A	E	F	G	ØJ	I	 kg.	AP		APM	
										ØL	M	ØL	M
AP/APM12050V01	12	50	115	192	158	146	75	42	1	15.8	2.8	18.1	1.6
AP/APM20050V01	20	50	125	196	161	145	75	42	1.2	21	2.9	23.7	1.6
AP/APM20063V01	20	63	125	210	174	158	93	49	1.5	21	2.9	23.7	1.6
AP/APM25050V01	25	50	140	202	165	145	75	42	1.6	26.6	3.4	29.7	2
AP/APM25063V01	25	63	140	215	179	158	93	49	1.8	26.6	3.4	29.7	2
AP/APM32063V01	32	63	160	225	188	162	93	49	2.3	35.1	3.6	38.4	2
AP/APM32090V02	32	90	160	258	220	196	124	67	3.3	35.1	3.6	38.4	2
AP/APM40063V01	40	63	170	230	199	169	93	49	3	40.9	3.7	44.3	2
AP/APM40090V02	40	90	170	260	229	199	124	67	3.2	40.9	3.7	44.3	2
AP/APM50063V01	50	63	200	258	218	183	93	49	3.8	52.5	3.9	56.3	2
AP/APM50090V02	50	90	200	288	248	213	124	67	4.8	52.5	3.9	56.3	2
AP/APM50110V01	50	110	200	308	248	232	148	75	6.6	52.5	3.9	56.3	2
IP/IPM65090V02	65	90	CONTACT ROTEX										
IP/IPM65110V01	65	110											
IP/IPM80110V01	80	110											

DIMENSIONS

TYPE AF : Flange connection as per ASME 16.5 (#150-RF), Face to Face distance as per ASME 16.5
TYPE AF300: Flange connection as per ASME 16.5 (#300-RF), Face to Face distance as per ASME 16.5



(All dimensions are in mm)

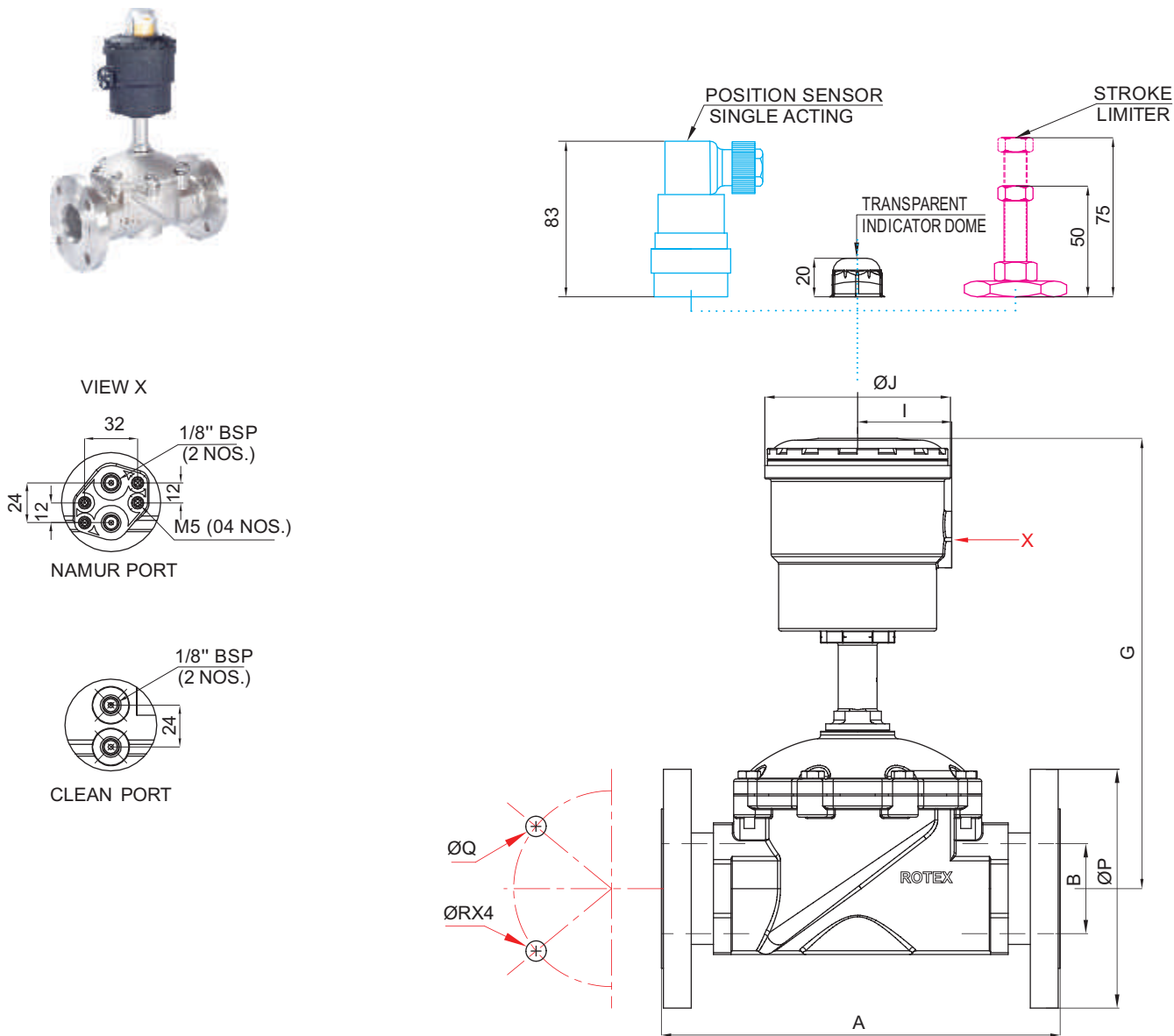
Type	DN	Actuator Ø	G	ØJ	I	AF							AF300						
						A	E	ØP	ØQ	nXØR	H	kg.	A	E	ØP	ØQ	nXØR	H	kg.
AF/AF300 12050V01	12	50	146	75	42	108	178	89	60.3	4x15.8	11.2	1.8	139.7	191	222.3	66.7	4x15.7	14.2	2.1
AF/AF300 20050V01	20	50	145	75	42	117.5	184	98	69.8	4x15.8	12.7	3	152.4	181	117.3	82.6	4x19.0	15.7	3.5
AF/AF300 20063V01	20	63	158	93	49	117.5	196	98	69.8	4X15.8	12.7	2.9	152.4	196	117.3	82.6	4x19.0	15.7	3.4
AF/AF300 25050V01	25	50	145	75	42	127	188	108	79.4	4x15.8	14.3	3	165.1	181	124.0	88.9	4x19.0	17.5	3.5
AF/AF300 25063V01	25	63	158	93	49	127	200	108	79.4	4x15.8	14.3	4.2	165.1	195	124.0	88.9	4x19.0	17.5	4.2
AF/AF300 32063V01	32	63	162	93	49	140	205	118	88.9	4x15.8	15.9	4.7	177.8	200	133.4	98.4	4x19.0	19.0	4.8
AF/AF300 32090V02	32	90	196	124	67	140	246	118	88.9	4x15.8	15.9	5.8	177.8	245	133.4	98.4	4x19.0	19.0	5.9
AF/AF300 40063V01	40	63	169	93	49	165	212	127	98.4	4x15.8	17.5	5.5	190.5	211	155.4	114.3	4x22.3	20.5	6.6
AF/AF300 40090V02	40	90	199	124	67	165	249	127	98.4	4x15.8	17.5	6.5	190.5	240	155.4	114.3	4x22.3	20.5	7.5
AF/AF300 50063V01	50	63	183	93	49	178	240	152	120.6	4X19	19.1	8.2	215.9	240	166.1	127.0	8x19.05	21.3	8.8
AF/AF300 50090V02	50	90	213	124	67	178	277	152	120.6	4x19	19.1	9.1	215.9	269	165.1	127.0	8x19.05	22.3	9.1
AF/AF300 50110V01	50	110	232	148	75	178	319	152	120.6	4x19	19.1	10.1	215.9	287	165.1	127.0	8x19.05	22.3	10.8

ANGLE SEAT VALVE

TYPE IF/ IF300

DIMENSIONS

TYPE IF : Flange connection as per ASME #150RF
TYPE IF300 : Flange connection as per ASME #300RF

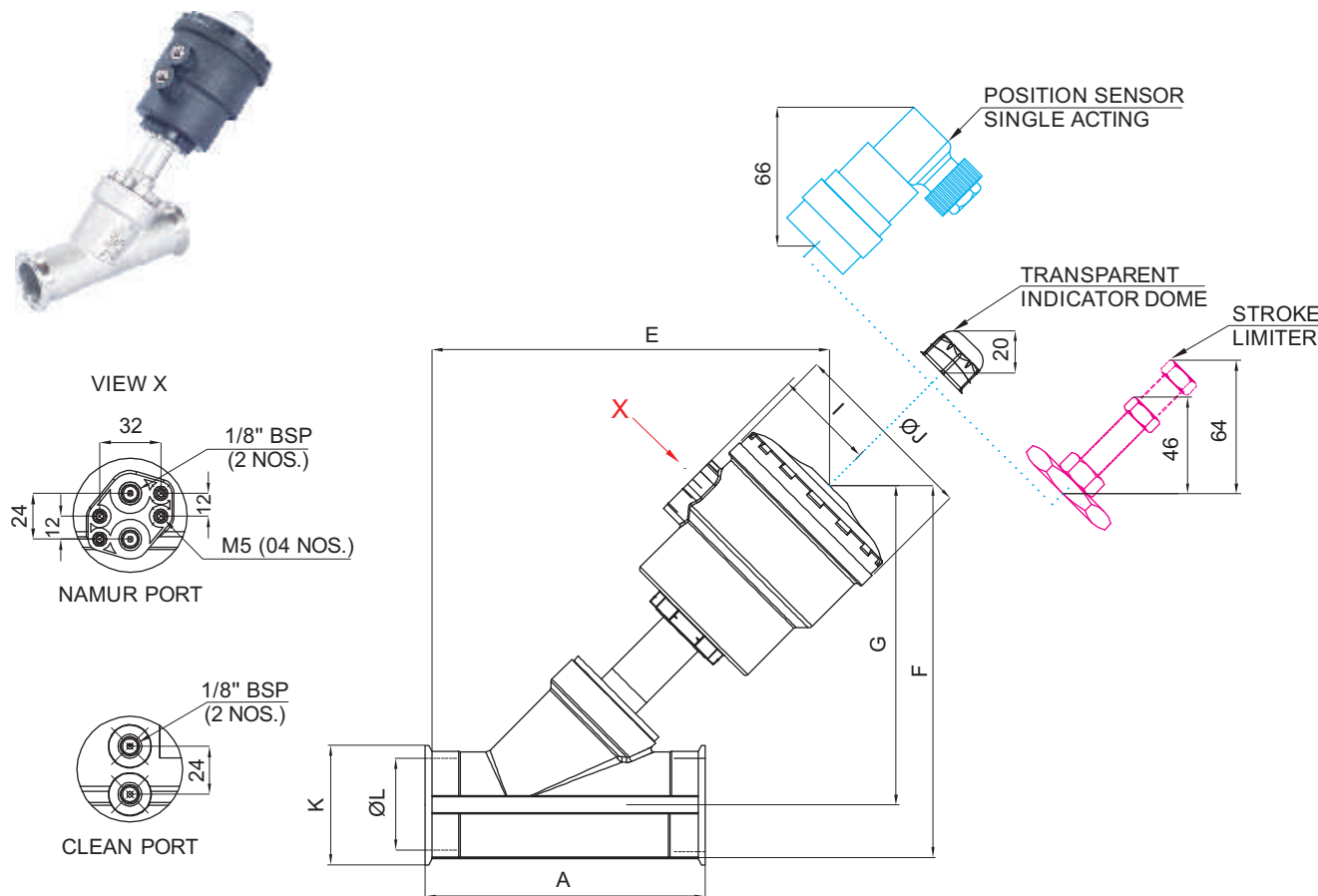


(All dimensions are in mm)

Type	DN	Actuator Ø	A	B	G	ØJ	I	IF					IF300				
								H	ØP	ØQ	n x ØR	kg.	H	ØP	ØQ	n x ØR	kg.
IF/IF300 65090V02	65	90	288	63.5	316	124	67	223	178	139.7	4x19	14	25.4	190.5	149.2	8x22.3	14.6
IF/IF300 65110V01	65	110	288	63.5	316	148	75	223	178	139.7	4x19	16.0	25.4	190.5	149.2	8x22.3	16.7
IF/IF300 80110V01	80	110	323	76.2	363	148	75	239	190	152.4	4x19	20.5	28.4	209.6	168.3	8x22.3	21.2

DIMENSIONS

TYPE AK : Triclamp end as per ISO 2852



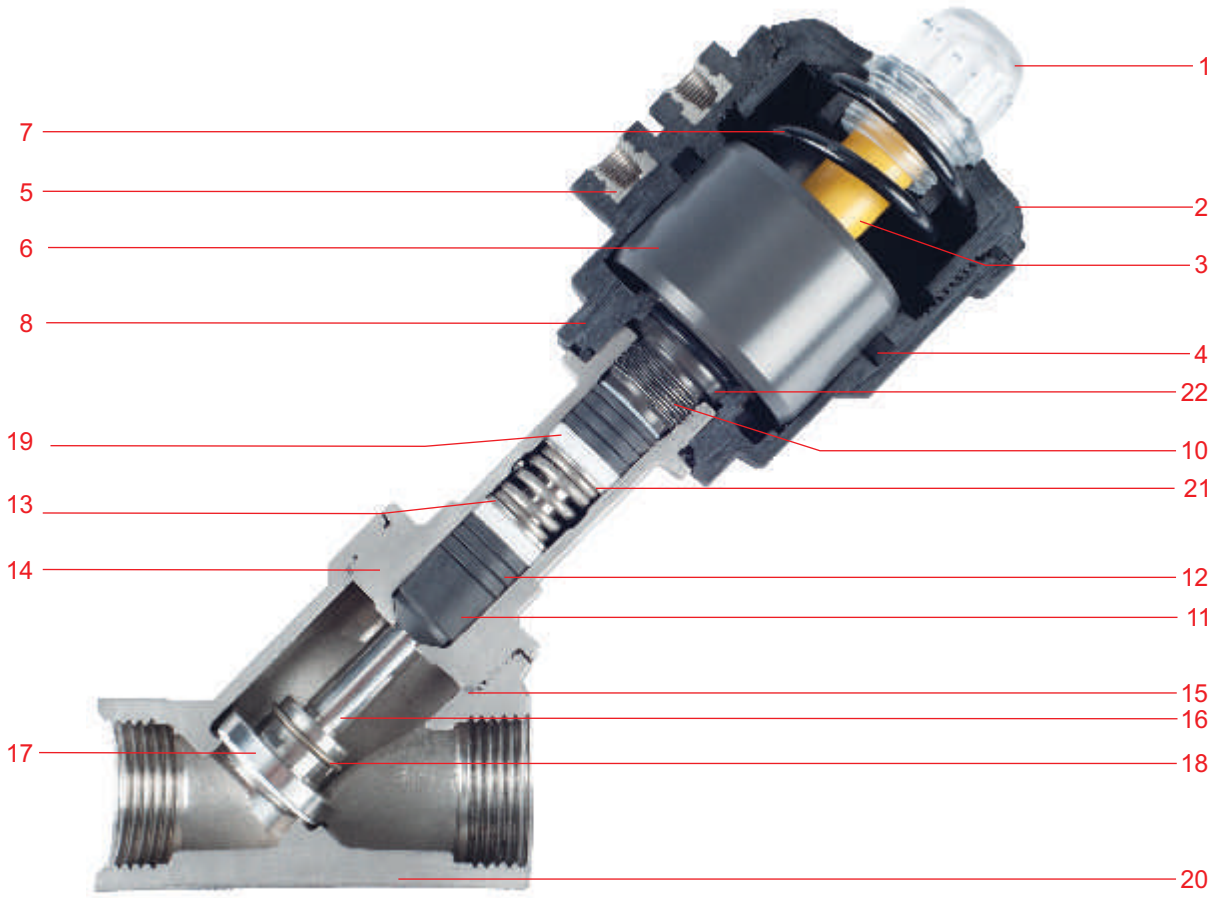
(All dimensions are in mm)

Type	DN	Actuator Ø	A	E	F	G	ØJ	I	ØL	ØK	 kg.
AK12050V01	12	50	100	168	163	146	75	42	18.1	34	1
AK20050V01	20	50	115	174	171	145	75	42	23.7	50.5	1.3
AK20063V01	20	63	115	183	184	158	93	49	23.7	50.5	1.5
AK25050V01	25	50	130	177	171	145	75	42	29.7	50..5	1.5
AK25063V01	25	63	130	197	184	158	93	49	29.7	50.5	1.7
AK32063V01	32	63	145	205	188	162	93	49	38.4	50.5	2.1
AK32090V02	32	90	145	248	222	196	124	67	38.4	50.5	3.2
AK40063V01	40	63	160	212	201	169	93	49	44.3	64	3
AK40090V02	40	90	160	250	231	199	124	67	44.3	64	4.1
AK50063V01	50	63	190	240	222	183	93	49	55.7	77.5	3.7
AK50090V02	50	90	190	278	252	213	124	67	55.7	77.5	5.3
AK50110V01	50	110	190	316	271	232	148	75	55.7	77.5	6.5
IK65090V02	65	90	CONTACT ROTEX								
IK65110V01	65	110									
IK80110V01	80	110									

ANGLE SEAT VALVE
SPECIAL

		
Valve with Proximity Sensor suitable for Single/ Double Acting	Valve with Flanged end & Position Sensor box, IP67	Valve with Metallic Operator, Media and Pilot 32 bar Hydraulic Oil
		
Valve with Butt weld end, as per ANSI/ ASME B 36.10 and B 36.19	MS flange with lock nut adopted to Threaded port Valve	Valve with Mechanical stroke limiter

And Many More...



ORDERING CODE

CODE	TOOL
T50	For opening Ø50 operator
T63	For opening Ø63 operator
T90	For opening Ø90 operator
T110	For opening Ø110 operator

ORDERING EXAMPLE

T50
Cover opening tool for operator Ø50

TOOL KIT



Note : To avoid damage, held operator in soft
Jaw vice, and open Cover using
special tool

ANGLE SEAT VALVE

ORDERING CODE SPARES

		Description	Material	Pos. No.	Qty.
Body			CF8 (SS304) CF3M (SS 316L Cast), (1.4435)	20	1
Repair Kit (97)	Consists of Operator, Sleeve, Seat and Seal kit assembly				
	Operator Assembly (99)	Consists of			
		Indicator Dome	Polycarbonate	1	1
		Operator Cover	Glass filled Nylon	2	1
		Open Indicator	ABS	3	1
		Piston Seal	NBR	4	1
		Insert	SS316/ SS304	5	2
		Piston	Aluminium Anodised	6	1
		Piston Spring	Carbon Steel (IS4454 GR II)	7	1*
		Piston Inner Spring	Carbon Steel (IS4454 GR II)	7A	1*
		Operator	Glass filled Nylon	8	1
		Shaft Seal	NBR	9	1
		Hex Assembly	Aluminium hard Anodised	10	1
		Operator Seal	NBR	21	2
	Sleeve Assembly (95)	Consists of			
		Shaft Bearing	PTFE/ PEEK	11	1
		Gland Packing	PTFE	12	6
		Gland Spring	SS302	13	1
		Sleeve	CF8 (SS304), CF3M (SS316L, Cast), (1.4435)	14	1
		Body Seal	Graphoil	15	1
		Shaft	SS304/ SS316L (1.4404)	16	1
		Hex Assembly	Aluminium hard Anodised	95	1
		Washer	SS304	95	2
		Gland Packing Retainer	PTFE	19	1
	Seat Assembly (96)	Consists of			
		Seat holder assembly	SS304/ SS316	17	1
		Retaining Ring	SS302	18	1
	Seal Kit (98)	Consists of			
		O ring/ Quad seals	NBR/ VITON		6/ 1
		Body Seal	Graphoil	15	1

*(Where applicable)

ORDERING CODE SPARES

1	2	3	4	5	6	7
SPARE KIT	DN-OPERATOR	VERSION	FUNCTION	PILOT	SEAL SEAT	BODY
1	2	3	4	5	6	7
SPARE KIT	DN-OPERATOR	VERSION	FUNCTION	PILOT CONNECTION	SEAL SEAT	BODY
Operator Assembly 99	12050 40090	#	Normally Closed, Pressure above plug, Single acting F1	Clean Port P1	NBR PTFE *	CF3M B12
Seal Kit 98	12063 40110	V01	Normally Open, Pressure below plug, Single acting F2	NAMUR P2	VITON PEEK S17	CF8 *
Repair Kit 97	20050 50063	V02	Normally Closed, Bi-Directional, Single acting F3			
Seat Assembly 96	20063 50090		Normally Closed, Bi-Directional, Double acting F4			
Sleeve Assembly 95	25050 50110		Normally Closed, Pressure above plug, Single acting F5			
	25063 65090		Normally Closed, Pressure below plug, Single acting F6			
	32063 65110					
	40063 80110					

Note : * Do not specify when opted for

ORDERING EXAMPLE

99-32063-F1-P1

63 Ø Operator assembly having clean pilot ports, NBR seals and O rings suitable for 32 NB Normally Closed, Single Acting Angle Seat Valve, insert pressure above plug



Engineering For The Future

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