

YMV Series
PMEV Series
RLV Series
HLV Series
KMV Series
TMV Series
FT Series

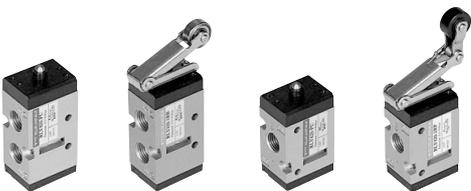
CHAPTER 09



YMV Series (3/2 Mechanically Valve)



PMEV Series
 (5/2, 3/2 Panel Mounted Mechanically Valve)



RLV Series
 (5/2, 3/2 Roller Lever Mechanically Valve)



HLV Series
 (5/2, 5/3, 3/2 Hand Lever Operated Spool Valve)



KMV Series
 (5/2, 3/2 Knob push / Pull Manually Valve)



TMV Series
 (5/2, 3/2 Toggle Lever Mechanically Valve)



FT Series
 (5/2 Foot Treadle Operated Spool Valve)

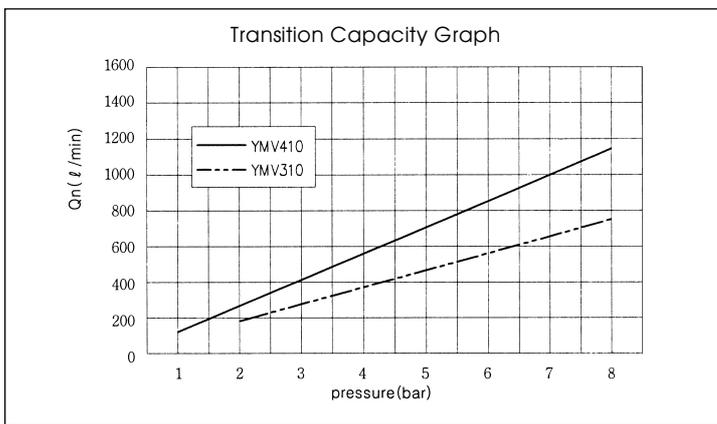
YMV Series

Manually & Mechanically Actuated Spool Valves

- 3/2
- Direct Operation Type
- A Wide Range of Option available
- Simple Panel Mounting

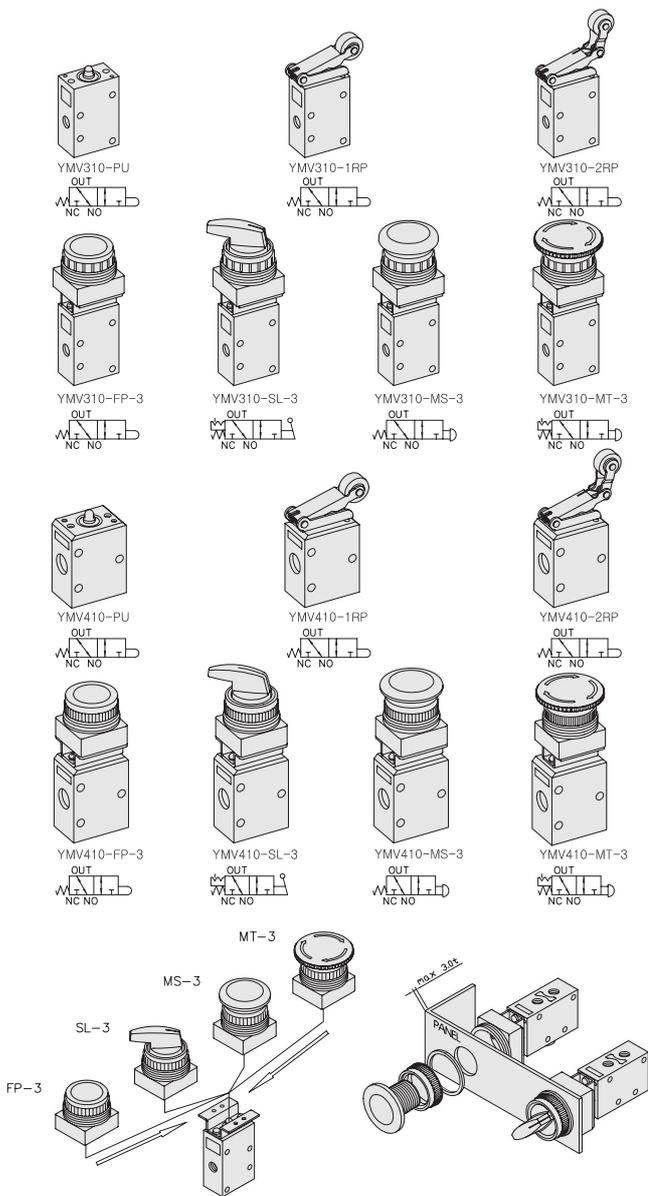
SPECIFICATION

ITEM	SERIES	YMV310	YMV410
FUNCTION		3/2-Way	
Fluids		Compressed Air & Inert Gases	
Port Size		1/8	1/4
Pressure(bar)		0~8.0	
Eff. Sectional Area(mm ²)-5bar		10.5	16.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Lubrication		Not Required(Use ISO VG32#)	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Button Parts : Stainless Steel, POM
 - Switch Parts : Glass Filled Nylon, POM

* The specification on each item can be amended without any prenotice to improve a performance.
 * The specification on each item can be different from actual specification.

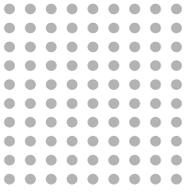


ORDERING NO.

YMV3 1 0 - FP - 3

Valve Series	Function	Port Size & Thread	Switch Type	Mounting Holes
YMV3: 1/8-Port Body	1 3/2 - Spring Return	0 G 1 NPT	PU Pushrod 1RP Two-way Plastic Roller Lever 1RB Two-way Bearing Roller Lever 2RP One-way Plastic Roller Lever 2RB One-way Bearing Roller Lever FP Flush, Push Button (R) SL 2-Position Selector (B) MS Mushroom 40mm dia Spring Return (R) MT Mushroom 40mm dia Turn to Unlock (R)	3 30mm

() Standard Color

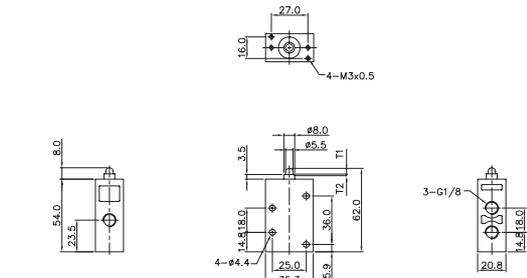


Manually & Mechanically Actuated Spool Valves

Port Thread 1/8, 1/4

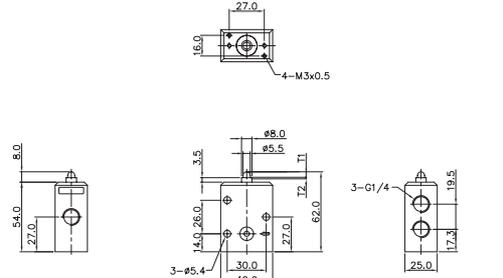
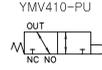
3/2-Way, Direct Pushrod Operation Thread-1/8

T ₁	Valid Operation Dist	3.5mm
T ₂	Invalid Operation Dist	1.0mm
F ₁	Pressure for Valid Operation	3.5kg _f
F ₂	Pressure for Invalid Operation	



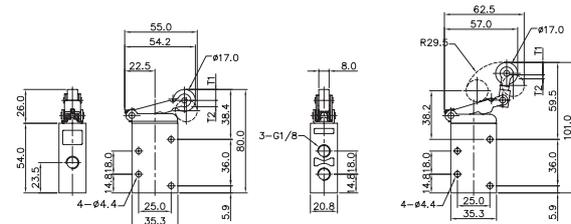
3/2-Way, Direct Pushrod Operation Thread-1/4

T ₁	Valid Operation Dist	3.5mm
T ₂	Invalid Operation Dist	1.0mm
F ₁	Pressure for Valid Operation	3.5kg _f
F ₂	Pressure for Invalid Operation	



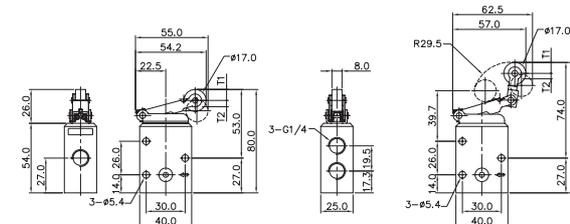
3/2-Way, Direct Roller Lever Operation Thread-1/8

	YMV310-1RP	YMV310-2RP
T ₁	Valid Operation Dist	8.5mm 9.0mm
T ₂	Invalid Operation Dist	3.0mm 3.5mm
F ₁	Pressure for Valid Operation	2.0kg _f 2.0kg _f
F ₂	Pressure for Invalid Operation	



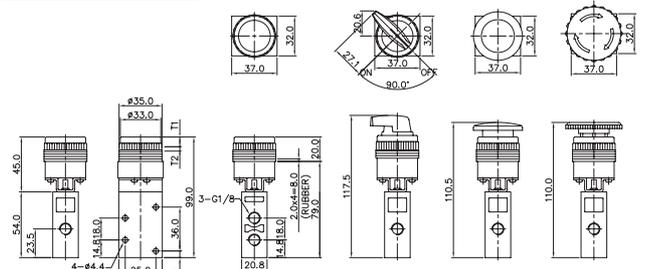
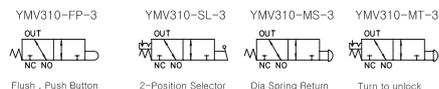
3/2-Way, Direct Roller Lever Operation Thread-1/4

	YMV410-1RP	YMV410-2RP
T ₁	Valid Operation Dist	8.0mm 9.0mm
T ₂	Invalid Operation Dist	3.0mm 3.5mm
F ₁	Pressure for Valid Operation	2.0kg _f 2.0kg _f
F ₂	Pressure for Invalid Operation	



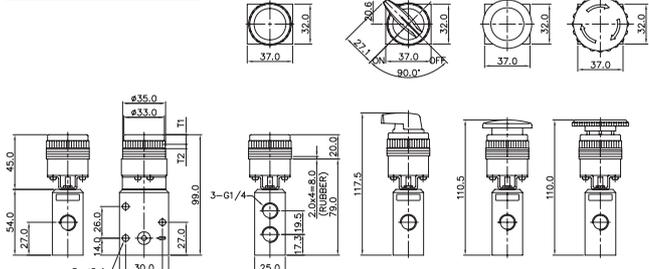
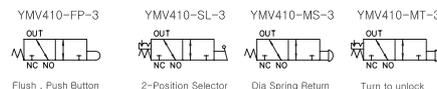
3/2-Way, Direct Pushrod & Selector Operation Thread-1/8

	YMV310-FP-3	YMV310-SL-3	YMV310-MS-3	YMV310-MT-3
T ₁	Valid Operation Dist	5.5mm		
T ₂	Invalid Operation Dist	1.0mm		
F ₁	Pressure for Valid Operation	3.5kg _f		
F ₂	Pressure for Invalid Operation			



3/2-Way, Direct Pushrod & Selector Operation Thread-1/4

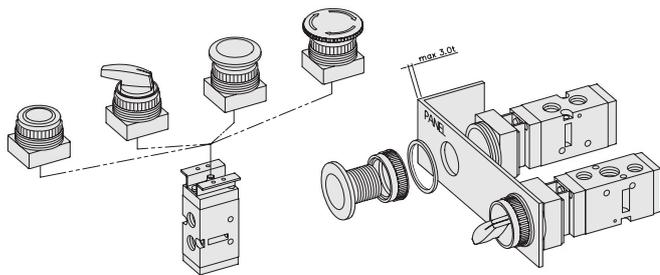
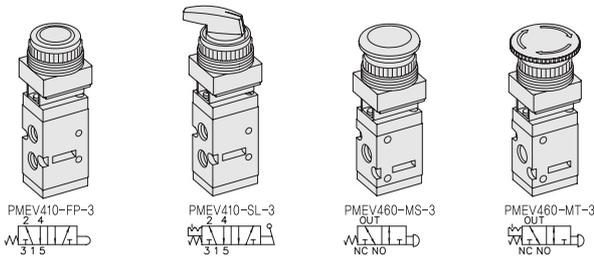
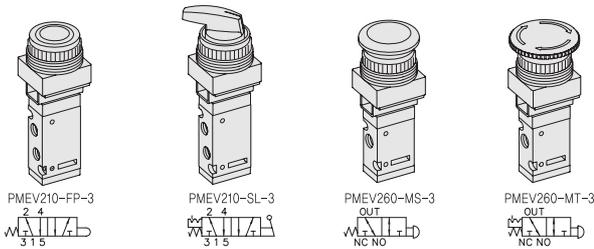
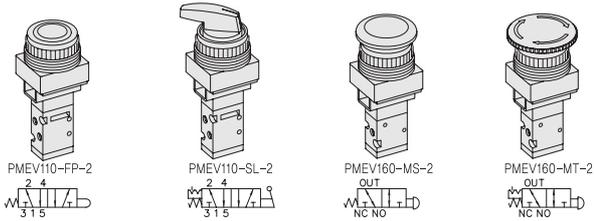
	YMV410-FP-3	YMV410-SL-3	YMV410-MS-3	YMV410-MT-3
T ₁	Valid Operation Dist	5.5mm		
T ₂	Invalid Operation Dist	1.0mm		
F ₁	Pressure for Valid Operation	3.5kg _f		
F ₂	Pressure for Invalid Operation			



PMEV Series

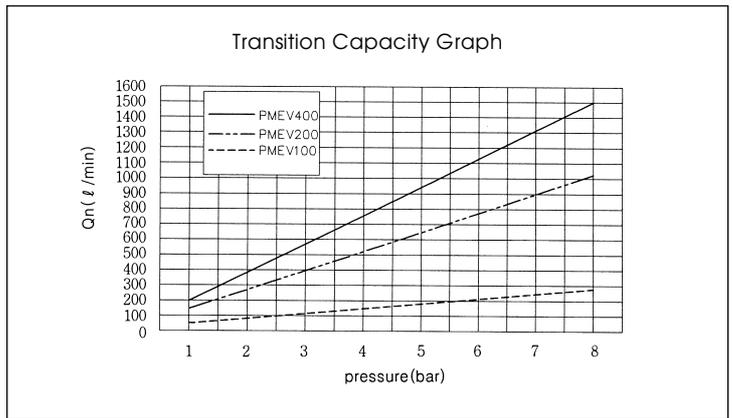
Panel Mounting Mechanically
Actuated Spool Valves

- 5/2, 3/2 - M5, 1/8, 1/4
- A Wide Range of Option Available
- Direct Operation Type
- Simple Panel Mounting



SPECIFICATION

ITEM	SERIES	PMEV100	PMEV200	PMEV400
FUNCTION		5/2, 3/2-Way		
Fluids		Compressed Air & Inert Gases		
Port Size		M5	1/8	1/4
Pressure(bar)		0~8.0		
Eff. Sectional Area(mm ²)-5bar		3.5	12.6	19.0
Ambient & Fluid Temp.		5~60°C (41~140°F)		
Lubrication		Not Required(Use ISO VG32#)		



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Button Parts : Stainless Steel, POM
 - Switch Parts : Glass Filled Nylon, POM

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ORDERING NO.

PMEV1 1 0 - FP - 2

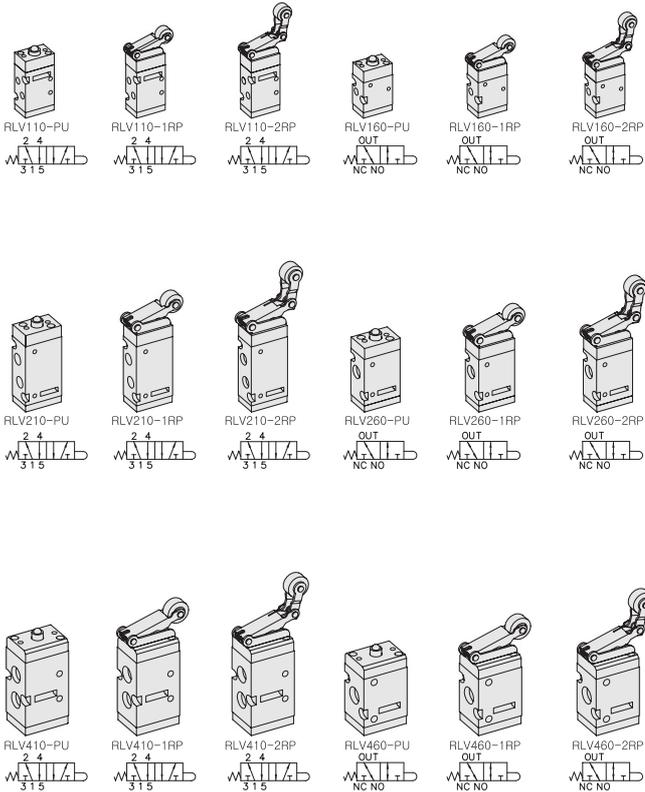
Valve Series	Function	Port Size & Thread	Switch Type	Mounting Holes
PMEV1 : M5×0.8-Port Body	1 5/2 - Spring Return 6 3/2 - Spring Return	0 G 1 NPT	FP Flush, Push Button (R) SL 2-Position Selector (B) MS Mushroom 40mm dia Spring Return (R) MT Mushroom 40mm dia Turn to Unlock (R)	2 25mm 3 30mm
PMEV2 : 1/8-Port Body				
PMEV4 : 1/4-Port Body				

() Standard Color

RLV Series

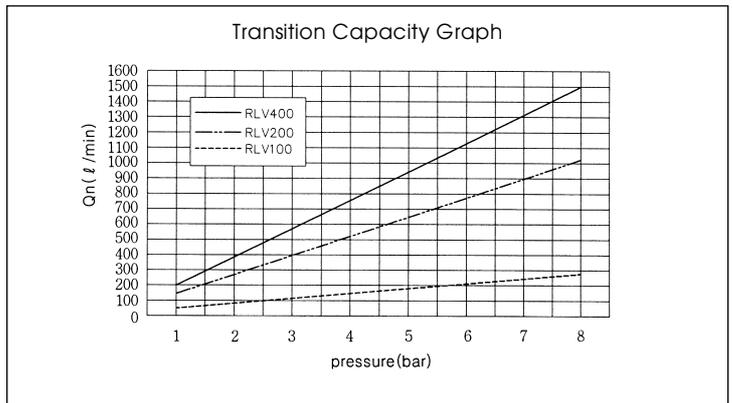
Roller Lever Mechanically Actuated Spool Valves

- 5/2, 3/2 - M5, 1/8, 1/4
- Excellent Durability
- Convenient Installation
- Direct Type, Quick Response



SPECIFICATION

ITEM	SERIES	RLV100	RLV200	RLV400
FUNCTION		5/2, 3/2-Way		
Fluids		Compressed Air & Inert Gases		
Port Size		M5	1/8	1/4
Pressure(bar)		0~8.0		
Eff. Sectional Area(mm ²)-5bar		3.5	12.6	19.0
Ambient & Fluid Temp.		5~60°C (41~140°F)		
Lubrication		Not Required(Use ISO VG32#)		



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Lever Parts : Steel Plate, POM
 - Spool : Aluminium
 - Pilot Parts : Glass Filled Nylon
 - Seals : NBR
 - Cap : Zinc Pressure Die-Cast
 - Spring : Stainless
 - Button Parts : Stainless Steel

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* The specification on each item can be different from actual specification.

ORDERING NO.

RLV1 1 0 - PU

Valve Series	Function	Port Size & Thread	Operator / Function
RLV1 : M5×0.8-Port Body	1 5/2 - Spring Return 6 3/2 - Spring Return	0 G 1 NPT	PU Pushrod 1RP Two-way Roller Plastic Lever 1RB Two-way Roller Bearing Lever 2RP One-way Roller Plastic Lever 2RB One-way Roller Bearing Lever
RLV2 : 1/8-Port Body			
RLV4 : 1/4-Port Body			

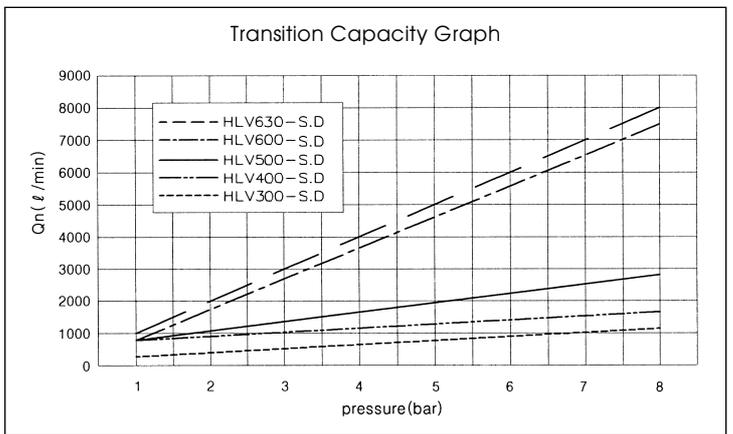
HLV Series

Hand Lever Operated
Spool Valves

- Direct Operation Type
- 5/2, 5/3, 3/2
- 1/8, 1/4, 3/8, 1/2
- High Flow Capacity

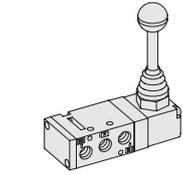
SPECIFICATION

ITEM	SERIES	HLV300	HLV400	HLV500	HLV600
FUNCTION		5/2, 5/3-Way	5/2, 5/3, 3/2-Way		5/2, 5/3-Way
Fluids	Compressed Air & Inert Gases				
Port Size		1/8	1/4	3/8	1/2
Pressure(bar)	0~8.0				
Eff. Sectional Area(mm ²)-5bar		13.5	18.0	35.0	90.0
Ambient & Fluid Temp.	5~60°C (41~140°F)				
Lubrication	Not Required(Use ISO VG32#)				

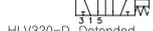


- The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Lever Parts : Steel, NBR, Plastic

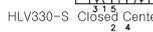
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HLV310-S Single Detented



HLV320-D Detented



HLV330-S Closed Center



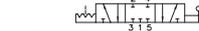
HLV340-S Exhaust Center



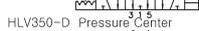
HLV350-S Pressure Center



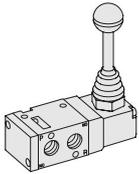
HLV330-D Closed Center



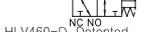
HLV340-D Exhaust Center



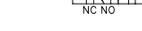
HLV350-D Pressure Center



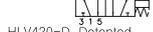
HLV460-S Single OUT



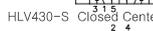
HLV460-D Detented OUT



HLV410-S Single



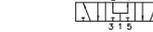
HLV420-D Detented



HLV430-S Closed Center



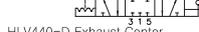
HLV440-S Exhaust Center



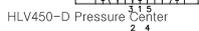
HLV450-S Pressure Center



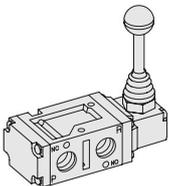
HLV430-D Closed Center



HLV440-D Exhaust Center



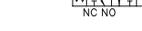
HLV450-D Pressure Center



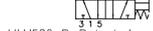
HLV560-S Single OUT



HLV560-D Detented OUT



HLV510-S Single



HLV520-D Detented



HLV530-S Closed Center



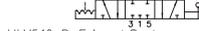
HLV540-S Exhaust Center



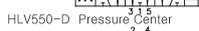
HLV550-S Pressure Center



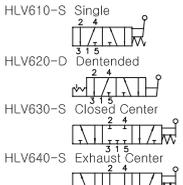
HLV530-D Closed Center



HLV540-D Exhaust Center



HLV550-D Pressure Center



HLV610-S Single



HLV620-D Detented



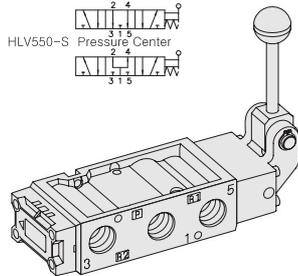
HLV630-S Closed Center



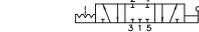
HLV640-S Exhaust Center



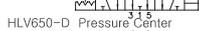
HLV650-S Pressure Center



HLV630-D Closed Center



HLV640-D Exhaust Center



HLV650-D Pressure Center



ORDERING NO.

HLV3 1 0 - S

Valve Series

HLV3 :
1/8-Port Body
HLV4 :
1/4-Port Body
HLV5 :
3/8-Port Body
HLV6 :
1/2-Port Body

Function

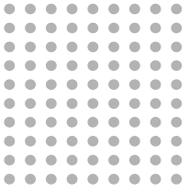
1	5/2 Single
2	5/2 Double
3	5/3 Closed Center
4	5/3 Open Center
5	5/3 Pressure Center
6	3/2 Normally Closed

Port Size & Thread

0	G
1	NPT

Return Method

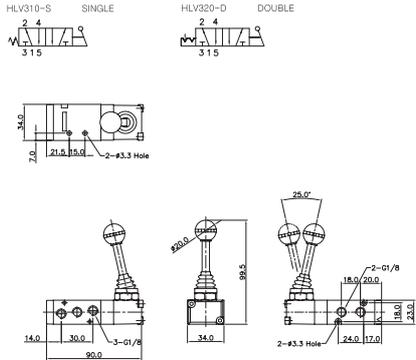
S	Single Spring Return
D	Double Detented



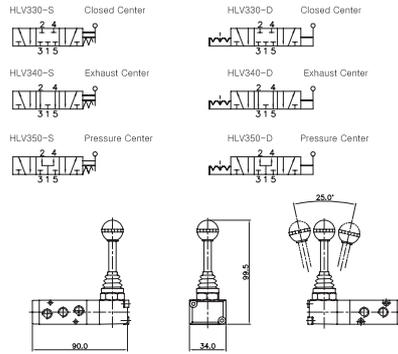
Hand Lever Operated Spool Valves

Port Thread 1/8, 1/4, 3/8, 1/2

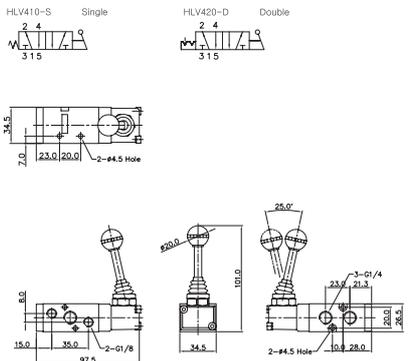
5/2-Way, Hand Lever Manually Actuated Valve Thread-G1/8



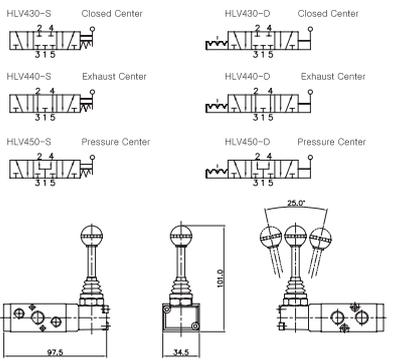
5/3-Way, Hand Lever Manually Actuated Valve Thread-G1/8



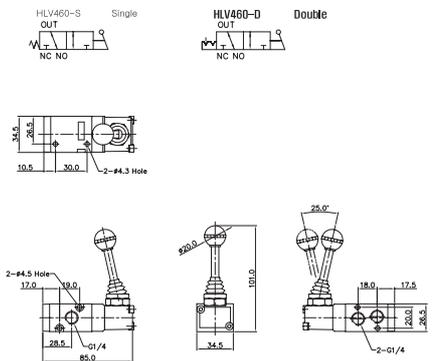
5/2-Way, Hand Lever Manually Actuated Valve Thread-G1/4



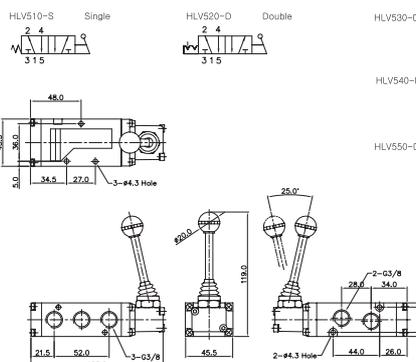
5/3-Way, Hand Lever Manually Actuated Valve Thread-G1/4



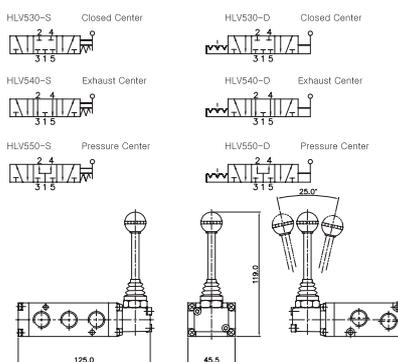
3/2-Way, Hand Lever Manually Actuated Valve Thread-G1/4



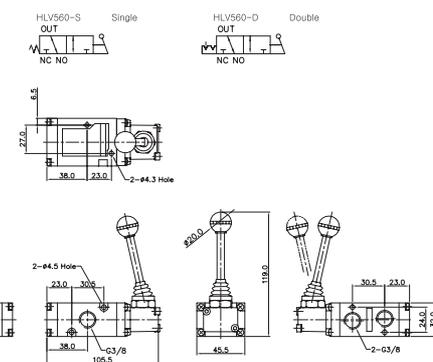
5/2-Way, Hand Lever Manually Actuated Valve Thread-G3/8



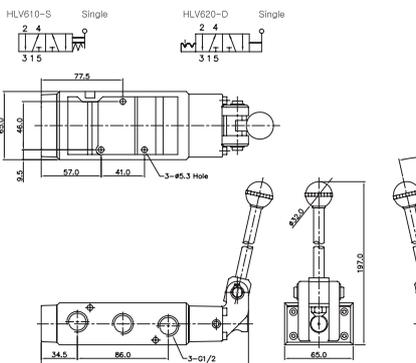
5/3-Way, Hand Lever Manually Actuated Valve Thread-G3/8



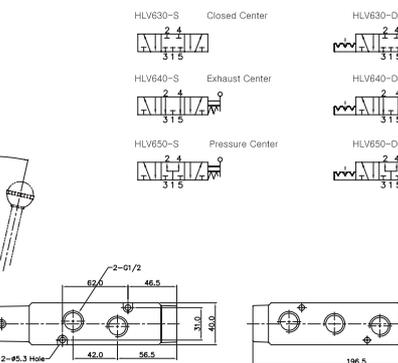
3/2-Way, Hand Lever Manually Actuated Valve Thread-G3/8



5/2-Way, Hand Lever Manually Actuated Valve Thread-G1/2



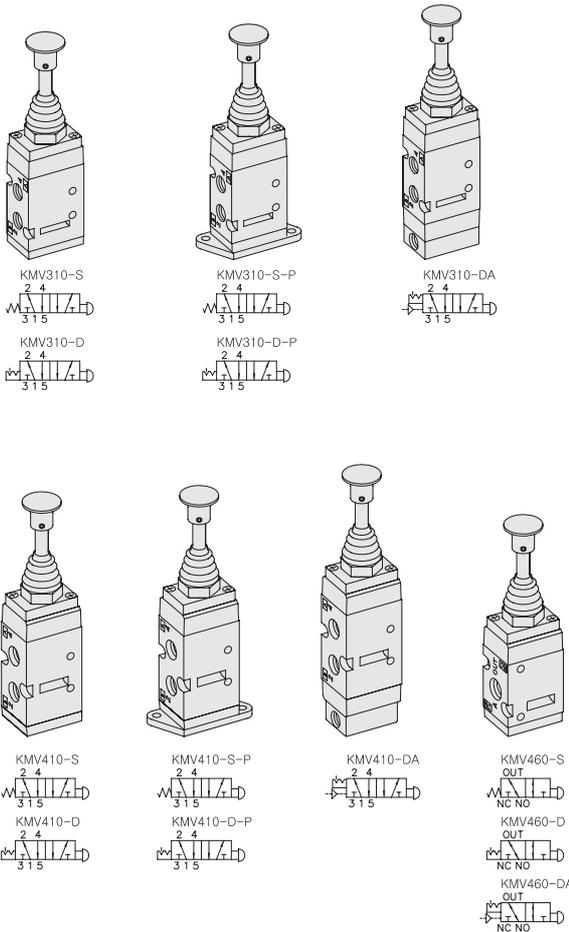
5/3-Way, Hand Lever Manually Actuated Valve Thread-G1/2



KMV Series

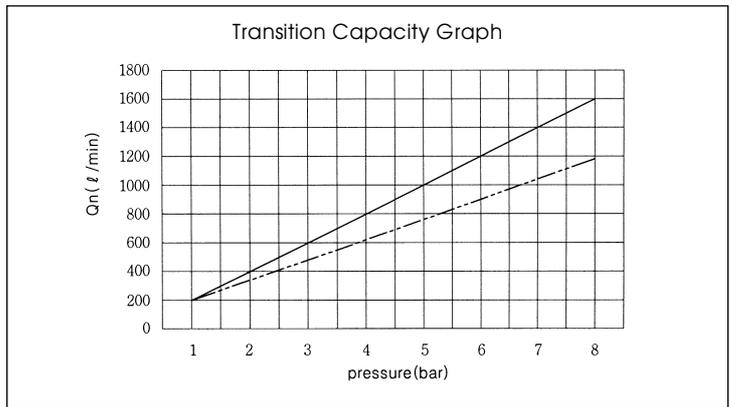
Knob Push / Pull Manually Actuated Spool Valves

- 5/2, 3/2 - 1/8, 1/4
- Direct Operation Type
- Simple Operation
- Space Economy Type

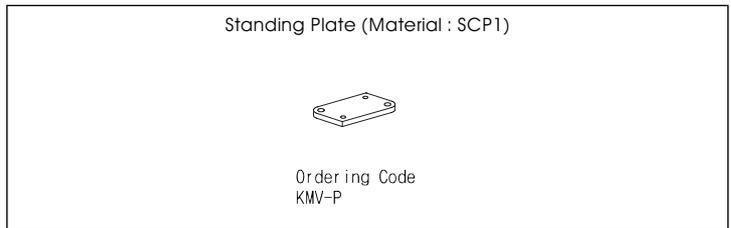


SPECIFICATION

ITEM	FUNCTION	KMV300	KMV400
	FUNCTION		5/2-Way
Fluids		Compressed Air & Inert Gases	
Port Size		1/8	1/4
Pressure(bar)		0~8.0	
Eff. Sectional Area(mm ²)-5bar		13.5	18.0
Ambient & Fluid Temp.		5~60°C (41~140°F)	
Lubrication		Not Required(Use ISO VG32#)	



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Cap : Zinc Pressure Die-Cast
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Lever Parts : Steel, NBR, Aluminium
 - Standing Plate : Steel Plate

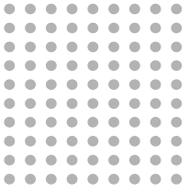


※ The specification on each item can be amended without any prenotice to improve a performance.
 ※ The specification on each item can be different from actual specification.

ORDERING NO.

KMV3 1 0 - S - P

Valve Series	Function	Port Size & Thread	Return Method	Plate
KMV3 : 1/8-Port Body	1 5/2 Single 6 3/2 Normally Closed	0 G 1 NPT	S Push, Spring Return D Push, Full DA Push, Air Return	P Standing Plate
KMV4 : 1/4-Port Body				

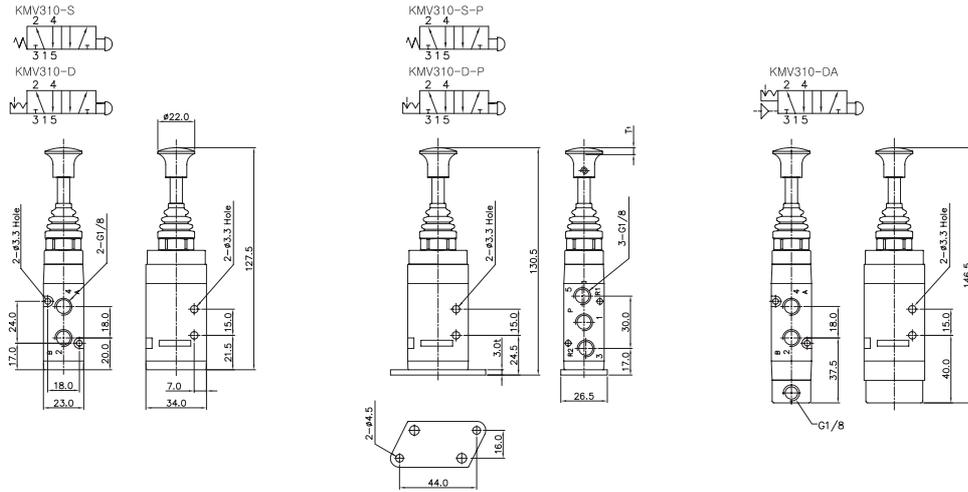


Knob Push / Pull Manually Actuated Valves

Port Thread 1/8, 1/4

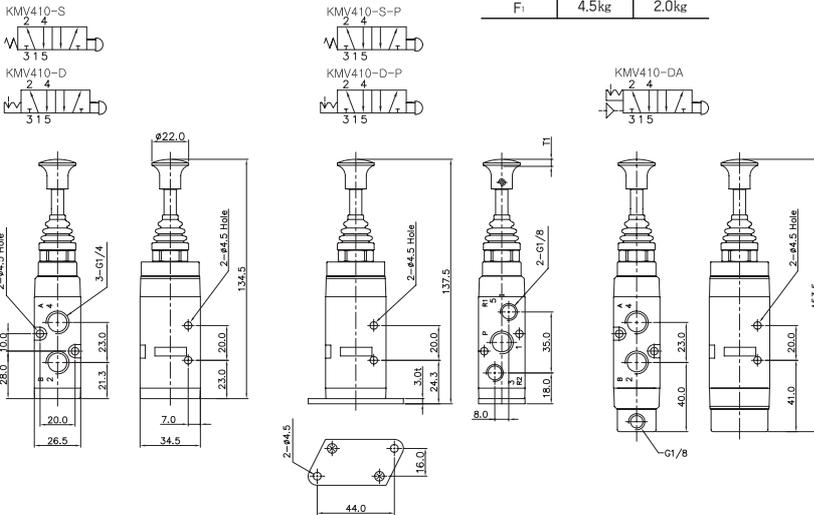
5/2-Way, Spring Return & Push Pull & Air Return Operation Thread-G1/8

ITEM	KMV310-S	KMV310-D
T ₁	4.0mm	4.0mm
F ₁	4.5kg	2.0kg

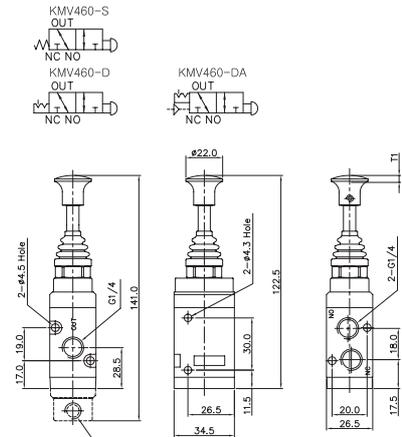


5/2-Way, Spring Return & Push Pull & Air Return Operation Thread-G1/4

ITEM	KMV410-S	KMV420-D
T ₁	4.0mm	4.0mm
F ₁	4.5kg	2.0kg



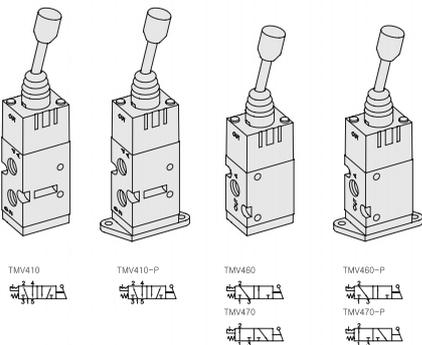
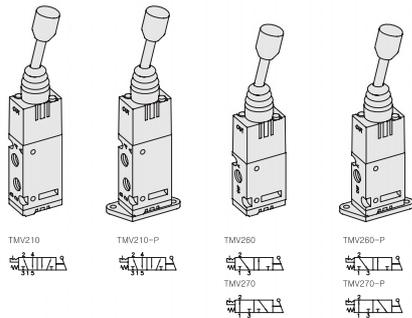
3/2-Way, Spring Return & Push Pull & Air Return Operation Thread-G1/4



TMV Series

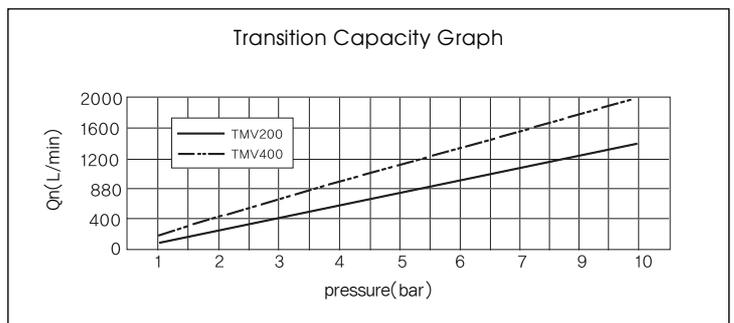
Toggle Lever operated Mechanically Actuated Spool Valves

- 5/2, 3/2 - 1/8, 1/4
- Direct Operation Type
- Simple Operation
- Manifold Mounting Type



SPECIFICATION

ITEM	SERIES	TMV200	TMV400
	FUNCTION	5/2, 3/2-Way	
Fluids	Compressed Air & Inert Gases		
Port Size		1/8	1/4
Pressure(bar)		2.0~10.0	0~8.0
Eff. Sectional Area(mm ²)-5bar		9.0	18.0
Ambient & Fluid Temp.	5~60°C (41~140°F)		
Lubrication	Not Required(Use ISO VG32#)		



- ### The Material of Parts
- Valve Body : Die-Cast Aluminium
 - Cap : Zinc Pressure Die-Cast
 - Spool : Aluminium
 - Seals : NBR
 - Spring : Stainless
 - Lever Parts : Steel, NBR, Aluminium

Standing Plate (Material : SCP1)

Ordering Code
TMV-P

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

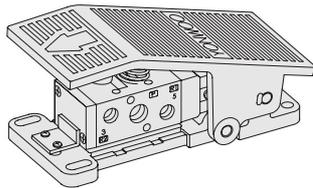
TMV2 1 - 0 - P

Valve Series	Function	Port Size & Thread	Plate
TMV2 : 1/8-Port Body	1 5/2 Single 6 3/2 Normally Closed 7 3/2 Normally Open	0 G 1 NPT	P Standing Plate
TMV4 : 1/4-Port Body			

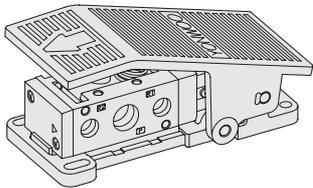
FT Series

Foot Treadle Operated
Air Return & Spring Return Spool Valves

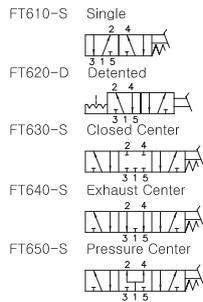
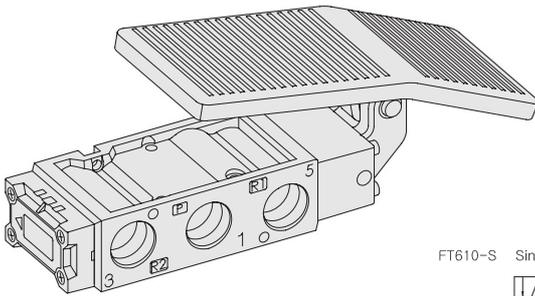
- 5/2, 5/3
- Pilot Type - 1/4, 3/8
- Direct Operation Type - 1/2
- Excellent Durability



FT410-S
2 4
3 1 5

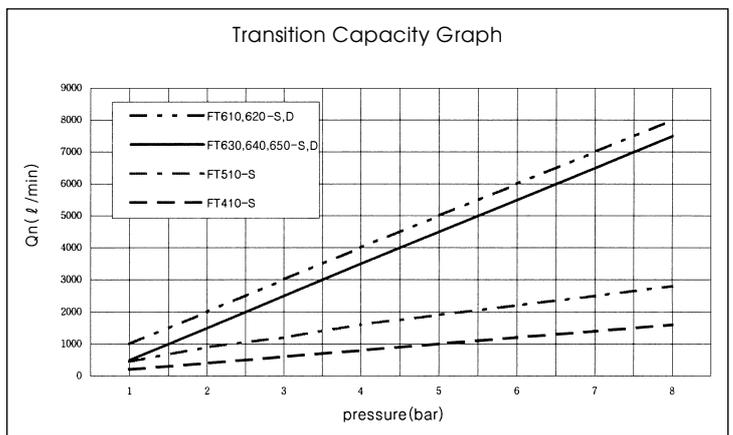


FT510-S
2 4
3 1 5



SPECIFICATION

ITEM	SERIES	FT410-S	FT510-S	FT600-S, D
	FUNCTION	5/2-Way		5/2, 5/3-Way
Fluids	Compressed Air & Inert Gases			
Port Size		1/4	3/8	1/2
Pressure(bar)		1.5~8.0		0~8.0
Eff. Sectional Area(mm ²)-5bar		19.0	35.0	90.0
Ambient & Fluid Temp.	5~60°C (41~140°F)			
Lubrication	Not Required(Use ISO VG32#)			



The Material of Parts

- Valve Body : Die-Cast Aluminium
- Spool : Aluminium
- Seals : NBR
- Spring : Stainless
- Cap : Zinc Pressure Die-Cast
- Pilot parts : Glass Filled Nylon
- Foot Upper Plate : Die-Cast Aluminium
- Foot Low Plate : Zinc Pressure Die-Cast

* The specification on each item can be amended without any prenotice to improve a performance.
* The specification on each item can be different from actual specification.

ORDERING NO.

FT4 1 0 - S

Valve Series

FT4 :
1/4-Port Body
FT5 :
3/8-Port Body
FT6 :
1/2-Port Body

Function

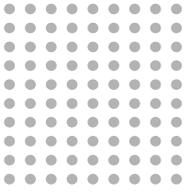
1	5/2 Single
2	5/2 Double
3	5/3 Closed Center
4	5/3 Open Center
5	5/3 Pressure Center

Port Size & Thread

0	G
1	NPT

Return Method

S	Spring Return
D	Detented

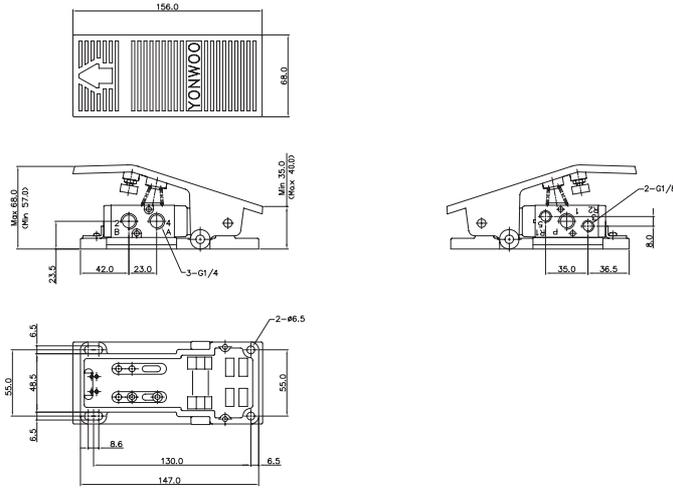


Foot Treadle Operated Spool Valves

Port Thread 1/4, 3/8, 1/2

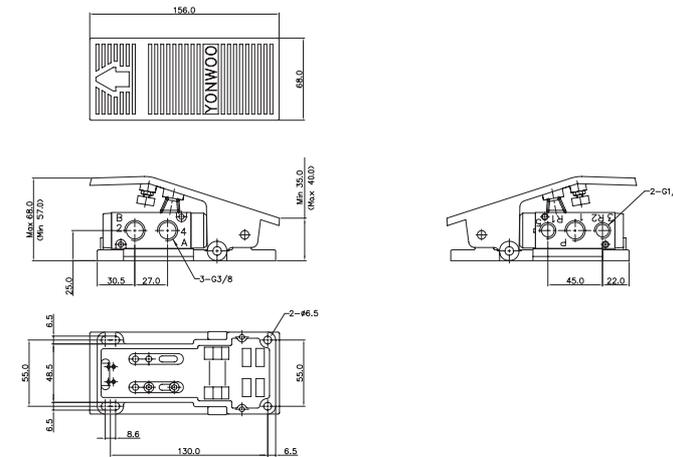
5/2-Way, Foot Valve, Air Return Operation Thread-G1/4

FT410-S



5/2-Way, Foot Valve, Air Return Operation Thread-G3/8

FT510-S

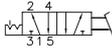


5/2-Way, Foot Valve, Spring Return & Detented Operation Thread-G1/2

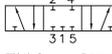
FT610-S



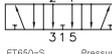
FT620-D



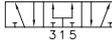
FT630-S



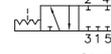
FT640-S



FT650-S



FT630-D



FT640-D



FT650-D

