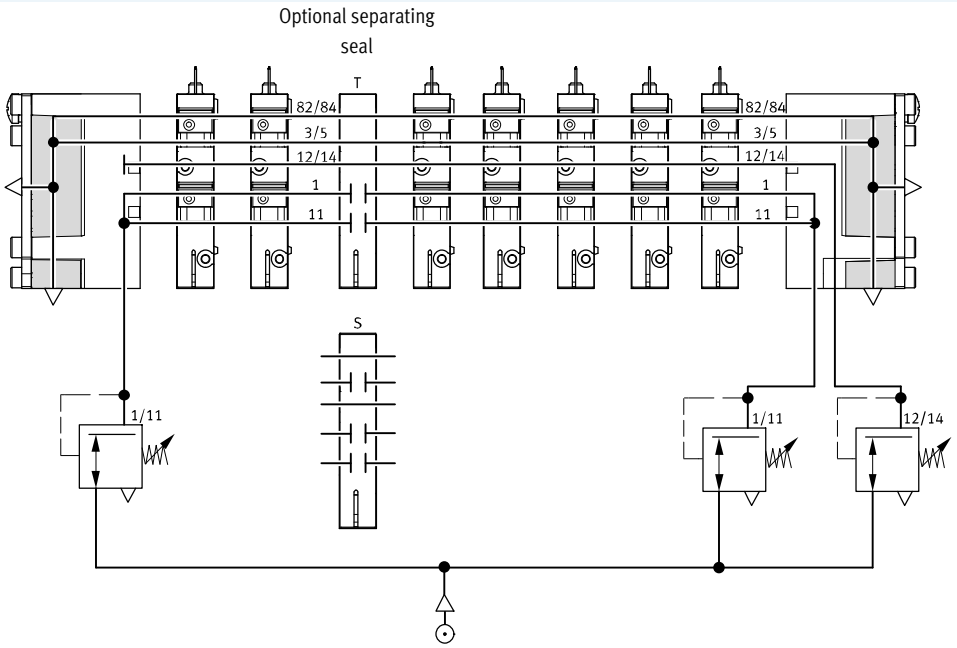
Examples: Compressed air supply

External pilot air supply, flat plate silencer at both ends

Compressed air supply via pneumatic multiple connector plate:
code H

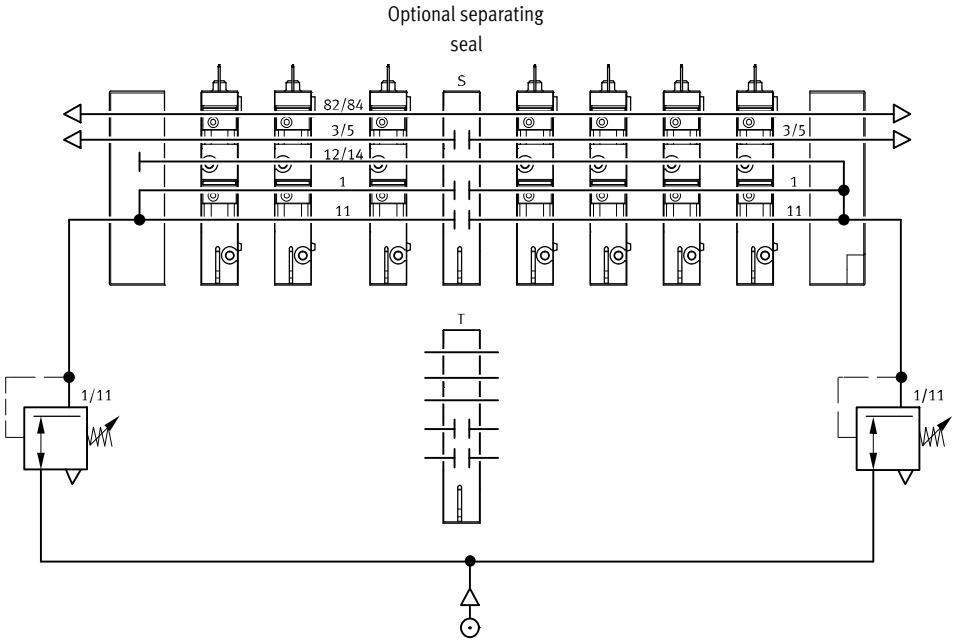
The diagram opposite shows an example of the configuration and connection of the compressed air supply with external pilot air supply. Port 12/14 on the pneumatic multiple connector plate is equipped with a fitting for this purpose. Ports 3/5 and 82/84 are vented via the flat plate silencers.
One separating seal each can be optionally used to create pressure zones.



Internal pilot air supply, ducted exhaust air or threaded silencer

Compressed air supply via end plates:
code Z

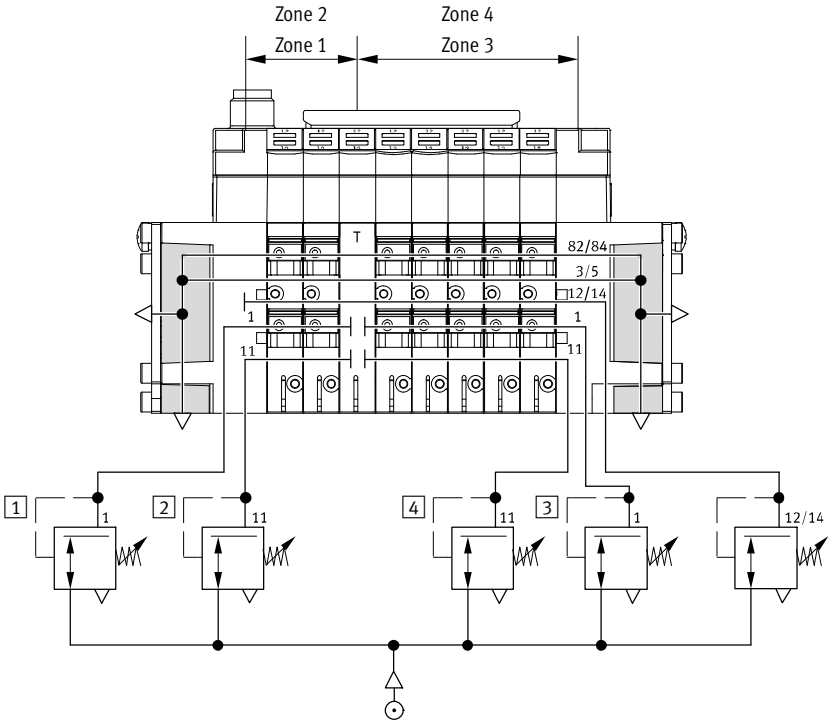
The diagram opposite shows an example of the configuration and connection of the compressed air supply with internal pilot air supply.
The pilot air is branched at the right-hand end plate of port 1 or 11. Ports 3/5 and 82/84 are vented via the threaded silencer.
One separating seal each can be optionally used to create pressure zones.



Example: Creating pressure zones

CPV with separator plate T

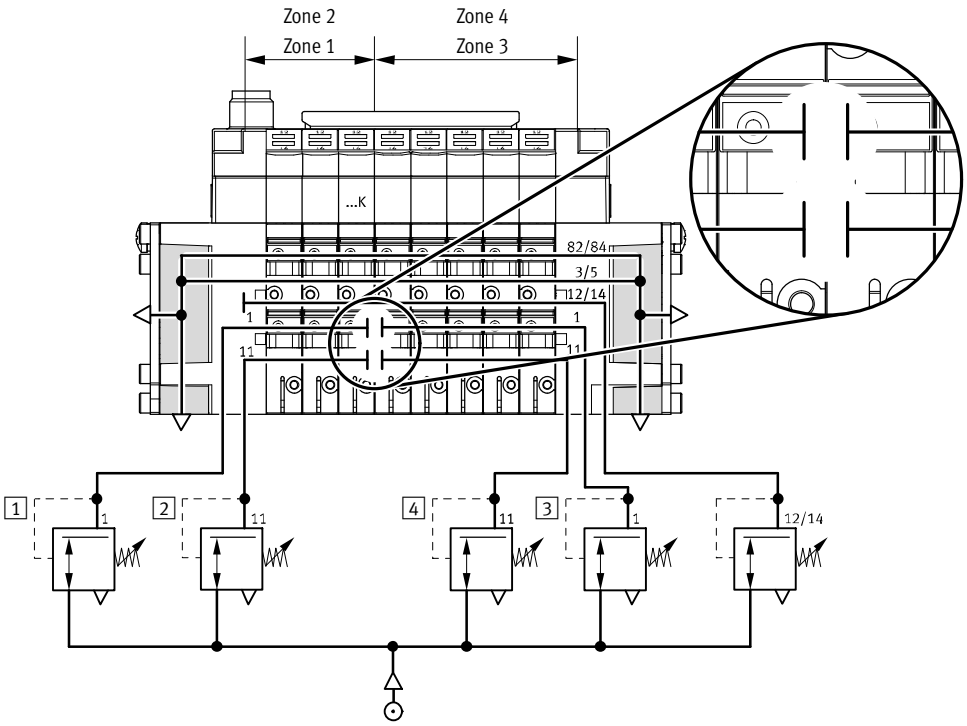
With the CPV valve terminals up to four pressure zones can be implemented. The diagram shows an example of the configuration and connection of four pressure zones using separator plate code T – with external pilot air supply.



1 Vacuum –0.9 bar
2 Blast pulse 2 bar
3 Forward stroke 6 bar
4 Return stroke 4 bar

CPV with integrated separation of ducts 1 and 11 with valves ...K

With the CPV valve terminals up to four pressure zones can be implemented. The diagram shows an example of the configuration and connection of four pressure zones with external pilot air supply and the use of a valve ...K with integrated separation of ducts 1 and 11.



1 Vacuum –0.9 bar
2 Blast pulse 2 bar
3 Forward stroke 6 bar
4 Return stroke 4 bar

Compressed air supply and exhausting

The two end plates that pressurise and exhaust the valve slices are a characteristic feature of a CPV valve terminal:

- Large duct cross sections ensure maximum flow rates even when multiple valves are switched in parallel
- Large flat plate silencers in the end plates
- Internal/external pilot air supply

Each individual valve is supplied with compressed air from two individual ducts (supply ports 1/11) and exhausted via a large, integrated exhaust duct (exhaust 3/5). This design permits unique flexibility and functionality. It is the easiest way of realising a number of pressure zones per terminal or combinations of vacuum applications.
The valve terminal is supplied via end plates, either on the left, on the right or on both sides. End plate combinations other than those listed are possible (on request).

Pilot air supply

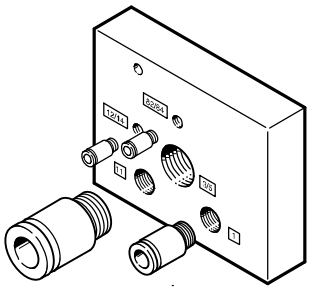
Internal pilot air supply

Internal pilot air supply can be selected if the supply pressure at pneumatic port 1 is 3 ... 8 bar. With internal pilot air supply the branch is located in the left or right-hand end plate. There is no port 12/14.

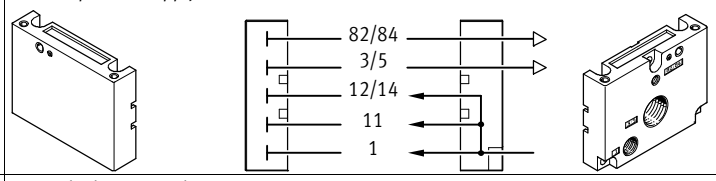
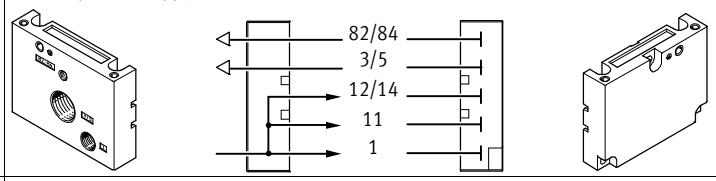
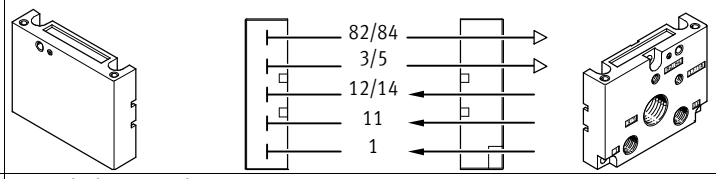
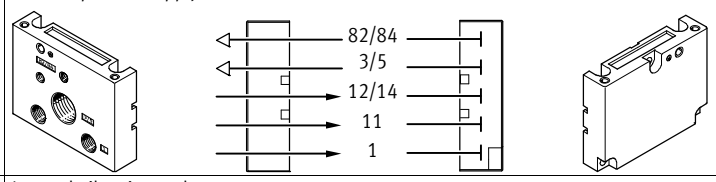
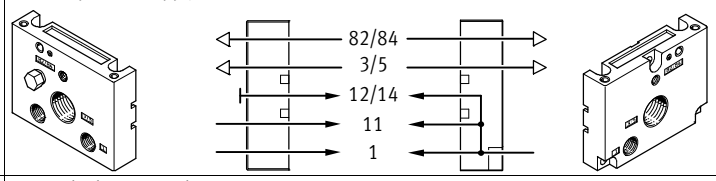
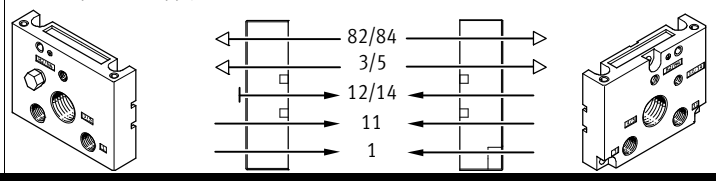
External pilot air supply

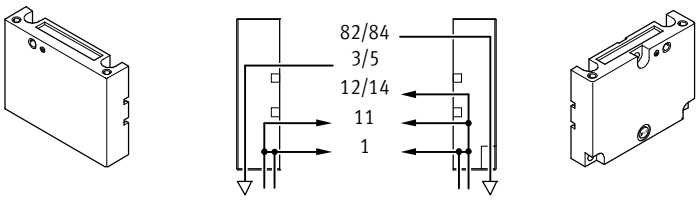
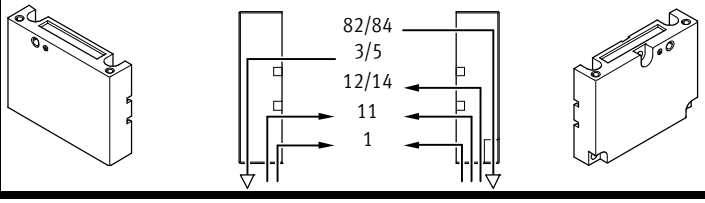
External pilot air supply is required if the supply pressure at pneumatic port 1 is less than 3 bar or greater than 8 bar. In this case, pressure of 3 ... 8 bar is applied at port 12/14.
If a gradual pressure build-up in the system using a pressurised on-off valve is required, external pilot supply air should be selected. The control pressure applied during switch-on is already very high in this case.
External pilot air supply is also required if it is necessary to ensure that the back pressure flaps (valve order code CY) are closed securely in the event of a sudden drop in operating pressure or if the operating pressure is switched off.

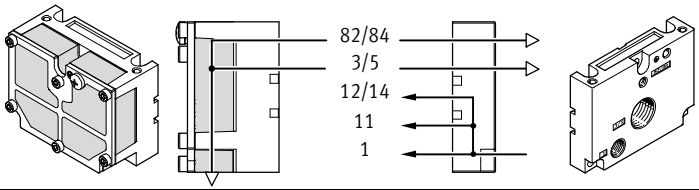
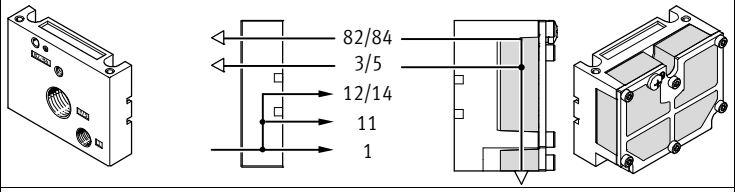
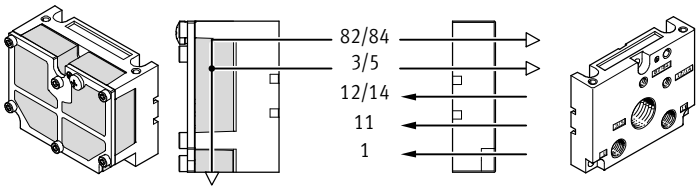
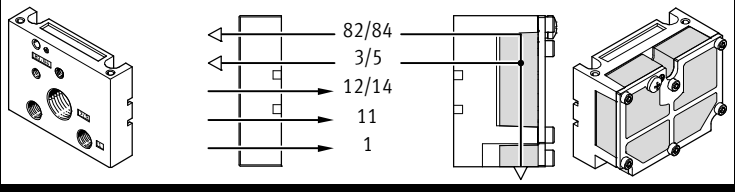
End plates



Example of an end plate:
The diagram shows a left-hand end plate with external pilot air supply.
The exhaust ports 3/5 and 82/84 can be equipped with fittings or silencers.
An end plate for internal pilot air supply does not have ports 12/14 and 11.
The port 82/84 is always present and should be fitted with a silencer.
The port 12/14 is connected internally with port 1 on an end plate for internal pilot air supply.

End plate combination for compressed air supply via end plate					
Code	Graphical symbol Type of pilot air supply (internal/external)	Size			Note
		10	14	18	
U	Internal pilot air supply 	■	■	■	• Ports in right-hand end plate only • No pressure zone separation permissible • Not suitable for vacuum
V	Internal pilot air supply 	■	■	■	• Ports in left-hand end plate only • No pressure zone separation permissible • Not suitable for vacuum
W	External pilot air supply 	■	■	■	• Ports in right-hand end plate only • No pressure zone separation permissible • Suitable for vacuum
X	External pilot air supply 	■	■	■	• Ports in left-hand end plate only • No pressure zone separation permissible • Suitable for vacuum
Y	Internal pilot air supply 	■	■	■	• Ports in left-hand and right-hand end plate • Maximum three pressure zones • Valves to the left of the separator plate suitable for vacuum
Z	External pilot air supply 	■	■	■	• Ports in left-hand and right-hand end plate • Maximum four pressure zones • Suitable for vacuum

End plate combination for compressed air supply via pneumatic multiple connector plate					
Code	Graphical symbol Type of pilot air supply (internal/external)	Size			Note
		10	14	18	
Y	Internal pilot air supply 	■	■	■	• Ports on pneumatic multiple connector plate • Pressure zone separation only permissible with separator plate (code T) • Maximum two pressure zones • Valves to the left of the separator plate suitable for vacuum • Only for accessories M, P, V, GQC, GQD (pneumatic multiple connector plate)
Z	External pilot air supply 	■	■	■	• Ports on pneumatic multiple connector plate • Pressure zone separation only permissible with separator plate (code T) • Maximum three pressure zones • Suitable for vacuum • Only for accessories M, P, V, GQC, GQD (pneumatic multiple connector plate)

End plate combination for compressed air supply via end plates with flat plate silencer					
Code	Graphical symbol Type of pilot air supply (internal/external)	Size			Note
		10	14	18	
A	Internal pilot air supply 	■	■	■	• Ports in right-hand end plate • No pressure zone separation permissible • Not suitable for vacuum
B	Internal pilot air supply 	■	■	■	• Ports in left-hand end plate • No pressure zone separation permissible • Not suitable for vacuum
C	External pilot air supply 	■	■	■	• Ports in right-hand end plate • No pressure zone separation permissible • Suitable for vacuum
D	External pilot air supply 	■	■	■	• Ports in left-hand end plate • No pressure zone separation permissible • Suitable for vacuum