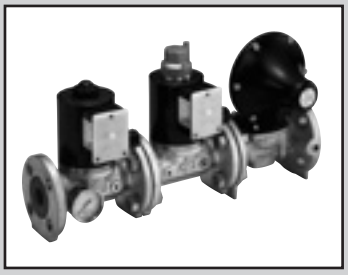


Complex integration of cutoff valve/governor/pressure gauge. Highly reliable and economical, ideal for medium pressure gas combustion equipment.

Medium pressure gas safety shutoff control system TAC-25 Series

- NC (Open when energized)
- City gas/LPG
- Port size: Inlet side 25A(JIS flange), outlet side 40A(JIS flange)

RoHS

Features

- **Multifunctional systematization**
  Double cutoff function, governor function, pressure gauge and pressure detection port, as required for medium pressure gas specification combustion equipment, are efficiently combined and systematized.
- **Solenoid valve drive method**
  Solenoid valve structure is adopted for the gas cutoff valve. The DC driven actuator with rectifier has eliminated noise and coil burnout for safety, improving maintainability as well.
- **Highly economical**
  All system components have a compact, space-saving design. No more complicated piping work as cutoff valve is delivered connected.

Applications

- Gas boilers (up to 2 t/h)
- Gas engines
- Gas absorption water coolers/heaters (up to 1,400 kW)
- Industrial furnaces

When placing an order

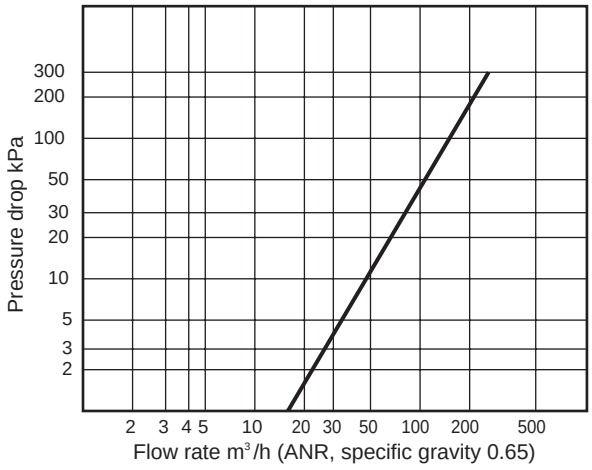
The medium pressure gas safety cutoff control system is adjusted and shipped with a selection of parts used according to the primary pressure/secondary pressure/flow rate. When ordering, fill in a separate sheet medium pressure gas safety cutoff control system specifications check sheet (page 1010). How to order differs depending on the specifications.

Specifications

Item		TAC-25	
Working fluid		City gas/LPG	
Working pressure MPa		0.1 to 0.2	0.1 to 0.3
Secondary pressure kPa		1.5 to 5	5 to 60
Flow rate (Specific gravity of city gas 0.65) m^3/h (ANR)		2 to 40	10 to 120
Rated voltage V		100 AC ±10% 200 AC ±10%	
Frequency Hz		Common to 50 and 60	
Power consumption (apparent power) VA		82 x 2	
Ambient temperature °C		−20 to +60 (no freezing)	
Opening time s		Approx. 10.0 (adjustable)	
Closing time s		1.0 or less	
Frequency cycles/min.		1 or less	
Start gas adjustment %		0 to 50	
Re-energizing intermission times		5.0 or moreUp	
Mounting orientation		Vertical direction with the coil up or horizontal direction with the coil horizontal	
Connection		Flange (JIS10KRF)	
Port size	Inlet side	25 A	
	Outlet side	40 A	
Weight kg		23.0	
Degree of protection		IPX4	

* The above specifications are a combination of VNM⊕VLM⊕C25N-B.
* Secondary pressure range refers to the range that can be set by changing parts such as pressure control springs.
* Contact CKD when using the product with a primary pressure of less than 0.1MPa or a flow rate exceeding 120m^3/h.

Flow characteristics



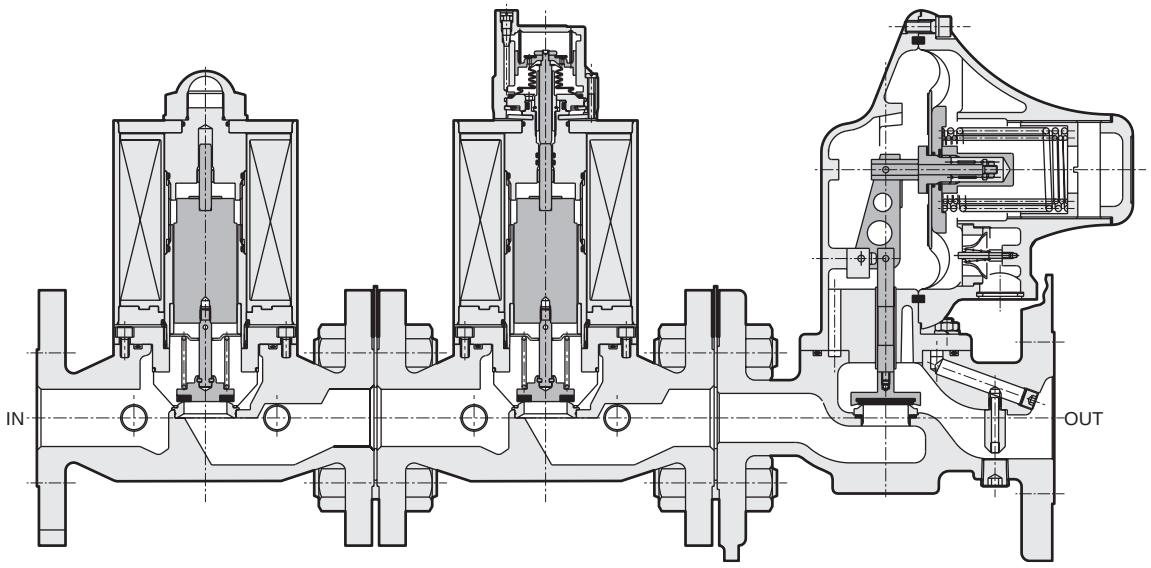
Reference: conversion coefficient

Converted flow rate = (flow rate in table) x (coefficient)

Gas	City gas (13A)	Propane	Butane
Specific gravity (air = 1)	0.65	1.6	2.0
Coefficient	1.0	0.63	0.57

⚠ When opening and closing the TAC-25 downstream cutoff valve, be sure to interlink it with the TAC-25 medium pressure gas cutoff valve. (If the downstream valve is the flow rate switching solenoid valve, interlinking with the medium pressure gas cutoff valve is not required.)

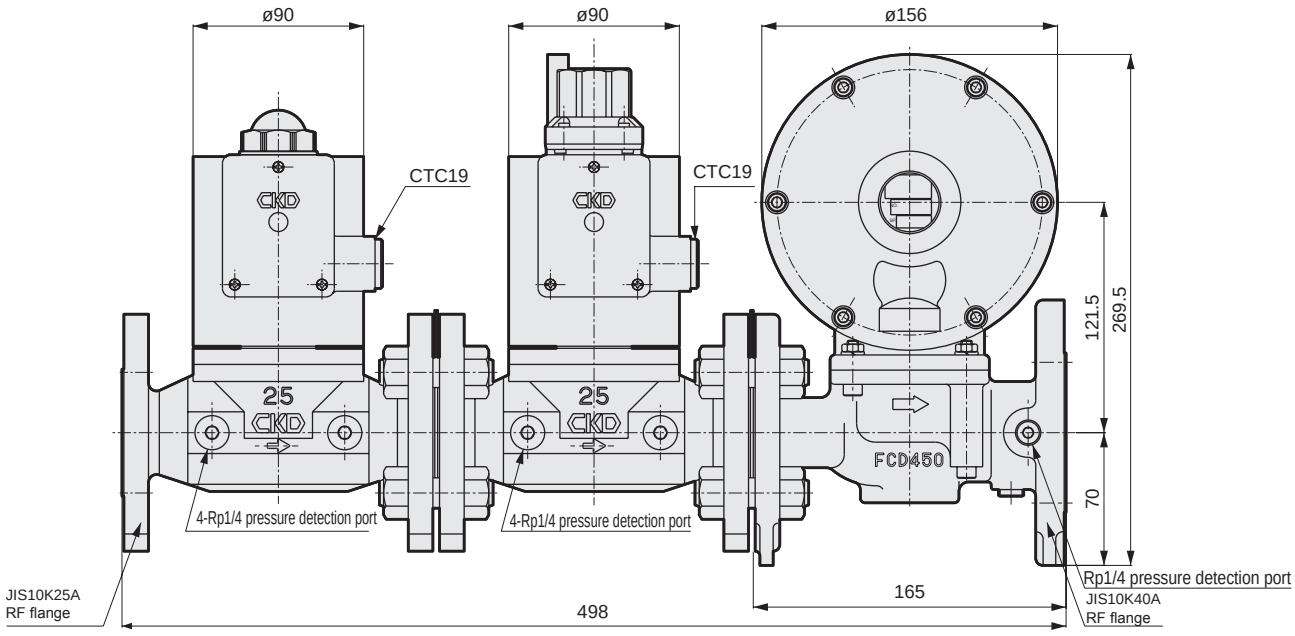
Internal structure



● Parts are the same as the single unit.
Refer to pages 1012 to 1017.

Dimensions

● TAC-25



Medium pressure gas safety shut off control system specifications check sheet

/ /

■ Company

■ User name

■ Quantity

■ Delivery date

■ Contact

■ Master unit used

● Common descriptions

Fluid name	
Specific gravity	

● Shut off valve descriptions

Voltage	

● Governor descriptions

Primary pressure MPa	Min.	Regular use	Max.
Secondary pressure kPa	*1 (setting flow rate: m^3/h (ANR))		
Flow rate m^3/h (ANR)	Min.		Max.
Mounting orientation	Position of the upper cap viewed from the IN side flange		
	1 right side	2 left side	
	3 OUT side	4 IN side	

● Pressure gauge descriptions

Pressure display	0.4 MPa

● Remarks

*1 : If setting flow rate is not designated due to secondary pressure adjustment, it is adjusted at the maximum flow rate.

Issuer → Dealer → Plant