



**TOTAL INGENIEROS S.A.C**

VENTAS, PROYECTOS, SERVICIOS EN INGENIERIA Y SISTEMAS DE REFRIGERACION

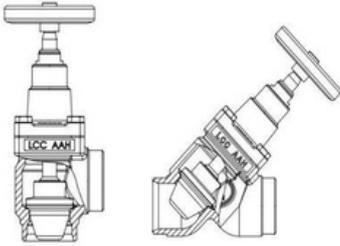
## Industrial Refrigeration Control Components



**Dofun**

Atlas For Selecting Models

Shandong Dofun Refrigeration Technology Co Ltd



The shape and structure of the throttle valve series products are not different from the shut-off valves, except that the shapes of their opening and closing parts are different. The opening and closing part of the regulating valve adopts a conical streamline type, and the valve stem is rotated clockwise to drive the opening and closing part to reduce the passage area. Conversely, the passage area is increased clockwise, so that the passage cross-sectional area can be changed to adjust the flow and pressure .

This series of valve has two types of angle type and straight-through type. It is equipped with hand wheel or bonnet manual driving device. You can choose the appropriate structure according to your needs.

DN15-DN100

Nominal diameter: DN15-DN100

4MPa

Nominal pressure: 4MPa

R12, R22, R502, R134a,R404a,R507,R717

Applicable medium: R12, R22, R502, R134a, R404a, R507, R717 and other refrigerants.

-46°C~+150°C

Applicable temperature:-50°C~+150°C

Note:

Pay attention to personnel safety during installation and maintenance, and do not perform any operation when the valve is under pressure;

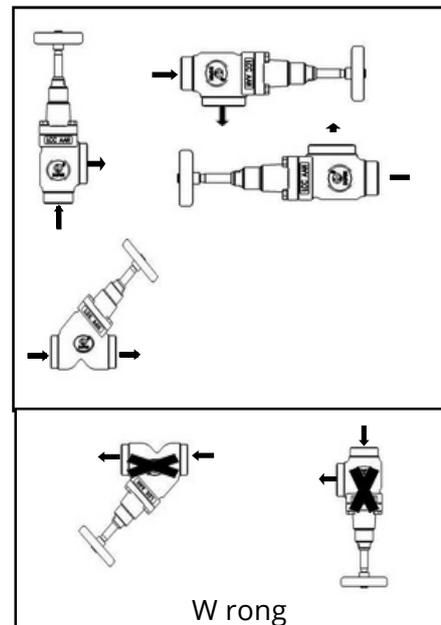
Perform regular inspections to determine the status of valve components and fasteners;

Installation method, welding, assembly and maintenance

Installation method

When installing this valve, make sure that the main valve stem is

vertically up or horizontal; the flow direction should be in accordance with the valve core indicated by the arrow on the valve body. (see picture 1) Install the pipeline to avoid liquid traps and prevent thermal expansion from causing excessive pressure and damage to the pipeline.



Welding

The valve cover should be removed during welding, and the components inside, especially the stuffing box, valve disc sealing material and O-ring, should be taken out, leaving only the valve body to avoid damaging these components during welding.

The valve cover can be removed in the following cases:  
+150°C;

The temperature between the valve body and the valve cover does

not exceed + 150 °C during welding;

The valve body is covered with a wet cloth to cool it during welding;

Note: During the welding process, prevent foreign matter such as dust, welding slag and welding debris from entering the valve body.

**Assembly**

Before reassembling the valve, the welding debris, welding slag, dust and dirt in the valve should be completely removed. And check the completeness or damage of the removed parts, there should be no missing parts, when using a torque wrench to tighten the bolts, tighten according to the torque in Table 1

Note: After the assembly is completed, the pressure test operation is only allowed when the valve is fully open, otherwise impurities in the pipeline will enter the valve stem thread and damage the valve stem.

Table 1 Torque table

Size	(N.m)	Size	(N.m)
DN15	22	DN50	44
DN20	22	DN65	75
DN25	22	DN80	44
DN32	44	DN100	75
DN40	44		

**Maintenance**

During repair and maintenance, if there is pressure inside the valve, do not operate it to avoid danger.

Check whether the O-ring, sealing material and stuffing

box

are intact

Check the valve body, stem, disc cone and other parts for

scratches

Note:

□ Replacement of stuffing box requires complete replacement.

The parts that need to be replaced must use the original parts of the DOFUN, and the installation must be performed strictly in accordance with the requirements of this manual. Otherwise, the company will not be responsible for the reduced or damaged performance.

□

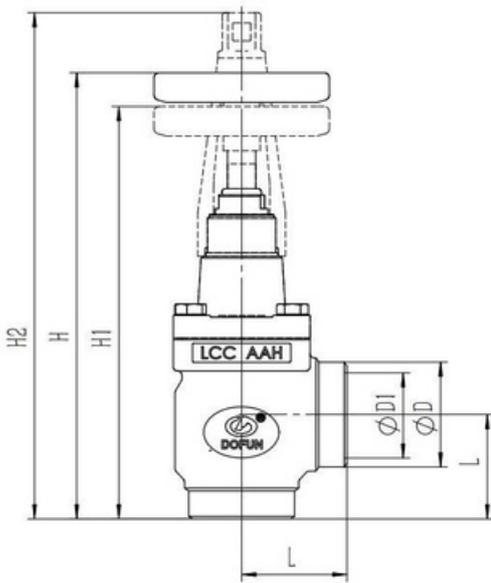
The torque required for tightening the bolts after maintenance shall be in accordance with Table 1.

□

Common faults and troubleshooting methods

Fault	Reason	Exclusion method
Phenomenon Valve Internal Leakage	There are impurities in the clean up theseal Damaged seals Impurity blockage	Replace
Stem stuck	Damaged	1) is broken 2) Damaged stuffing box threads
Clean up Replace Valve leakage Replace	The stuffing box O-ring	2) replace

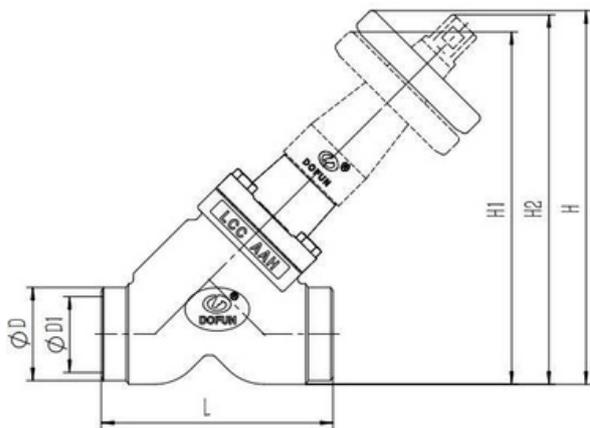
SIZE



Angle Regulating Valve

Angle Regulating Valve									
Type	Nominal diameter	尺寸 (mm) Size (mm)							Connection
		Φ D-GB	Φ D-DIN	ΦD1	L	H	H1	H2	
TVD-A	15	22	21.3	15	45	203	189	230	Butt welding
	20	27	27	20	45	203	189	230	
	25	32	33.7	25	45	203	189	230	
	32	38	42.4	32	56	265	247	309	
	40	45	48.3	38	56	265	247	309	
	50	57	60.3	49	60	257	237	292	
	65	76	76	62	90	287	263	324	
	80	89	89	76	106	328	300	378	
100	108	114	96	121	368	331	414		

Straight Regulating Valve



Straight Regulating Valve									
Type	Nominal diameter	尺寸 (mm) Size (mm)							Connection
		Φ D-GB	Φ D-DIN	ΦD1	L	H	H1	H2	
TVD-S	15	22	21.3	15	120	175	166	174	Butt welding
	20	27	27	20	120	175	166	174	
	25	32	33.7	25	120	175	166	174	
	32	38	42.4	32	156	219	206	236	
	40	45	48.3	38	156	219	206	236	
	50	57	60.3	49	149	242	228	239	
	65	76	76	62	176	277	259	268	
	80	89	89	76	216	323	303	312	
100	108	114	96	264	380	354	353		