Danfoss AID DN 15 – 25 Pressure Reducer Instructions

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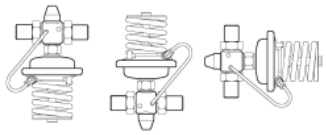
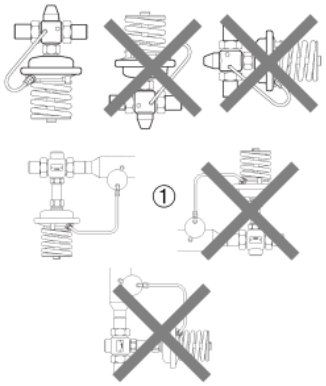
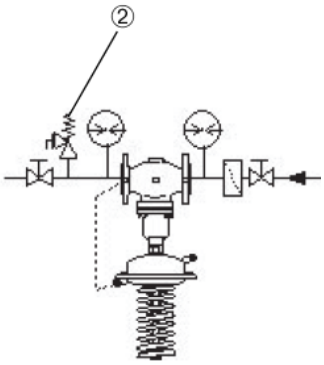
Danfoss AID DN 15 – 25 Pressure Reducer

ENGLISH	DEUTSCH	
Mounting **Admissible Installation Positions** Medium temperatures up to 100 °C: Can be installed in any position.	**Montage** **Zulässige Einbaulagen** Mediumstemperaturen bis 100 °C: Einbaulage beliebig.	
Medium temperatures >100 °C and always with steam (AISD) ① Installation only permitted in horizontal pipelines, with the actuator hanging downwards.	Mediumstemperaturen größer 100 °C und immer bei Dampf (AISD) ① Einbau nur in waagrechte Rohrleitung mit nach unten hängendem Antrieb zulässig.	
Installation Scheme **Note** The valve is open without pressure and is closing on rising pressure. System must be protected behind the pressure reducer by a safety monitoring unit (SV, SÜV) ②.	**Einbauschema** **Hinweis** Das Ventil ist drucklos geöffnet und schließt mit steigendem Druck. Anlage muss nach dem Druckminderer durch eine Sicherheitseinrichtung (SV, SÜV) ② abgesichert werden.	

ENGLISH

Valve Installation

1. Install strainer ① before the controller.

2. Rinse system prior to installing the valve.

3. Observe flow direction ② on the rating plate.

⚠

Flanges ③ in the pipeline must be in parallel position and sealing surfaces must be clean and without any damage.

4. Install valve.

5. Tighten screws cross-wise in 3 steps up to the max. torque.

Design with welded ends:

④ Pin only

⑤ Weld

DEUTSCH

Einbau Ventil

1. Schmutzfänger ① vor dem Regler einbauen.

2. Anlage vor dem Einbau des Ventils spülen.

3. Durchflussrichtung ② auf dem Typenschild beachten.

⚠

Flansche ③ in der Rohrleitung müssen parallel, Dichtflächen sauber und ohne Beschädigung sein.

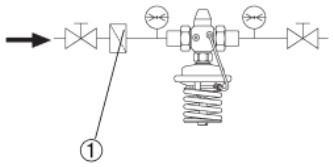
4. Ventil einbauen.

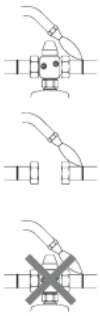
5. Schrauben über Kreuz in 3 Stufen bis zum max. Drehmoment anziehen.

Ausführung mit Schweißenden

④ nur heften

⑤ schweißen





ENGLISH

Impulse Tube and Seal Pot Mounting
(Only AISD Type,steam)

Which impulse tubes to use?

Use the impulse tube set AI (1x) ①:

Order No.: 003H0279
or use the following pipes:

Copper Ø 6x1
DIN 1754

DEUTSCH

Montage Steuerleitung und Vorlagegefäß
(Nur Typ AISD, Dampf)

Welche Steuerleitungen verwenden?

Es kann das Steuerleitungsset AI (1x) ① verwendet werden:

Bestellnummer: 003H0279

oder folgende Rohre verwenden:

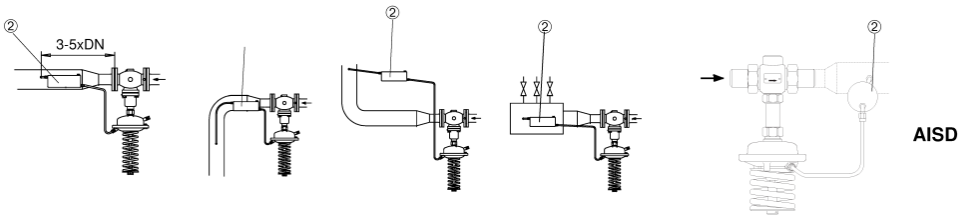
Kupfer Ø 6x1
DIN 1754

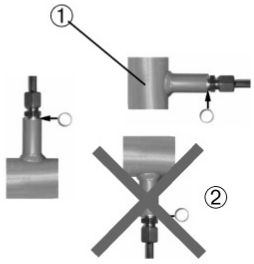
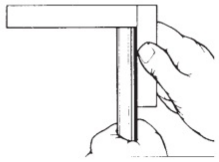
Seal Pot Installation ②

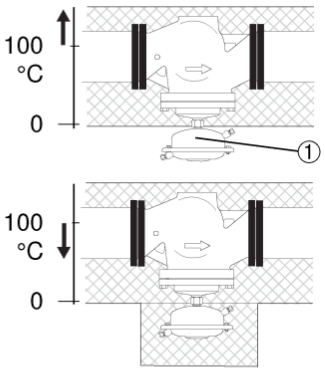
Examples

Einbau Vorlagegefäß ②

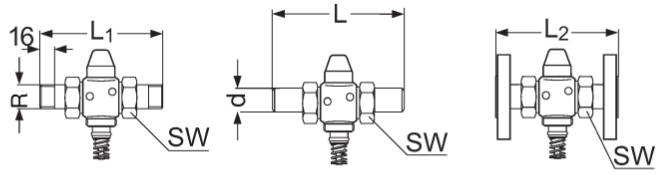
Beispiele

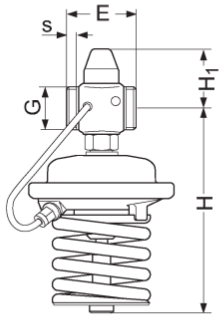


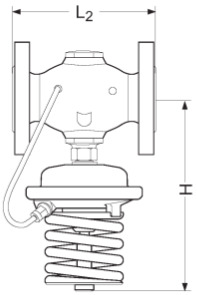
ENGLISH	DEUTSCH	
Connection to the Pipe-line ① 1. No connection downwards ②, could become dirty.	**Anschluss an der Rohr-leitung ①** 1. Anschluss wegen Verschmutzung nicht nach unten ②.	
2. Cut pipe in rectangular sections ③ and burr.	2. Rohr rechtwinklig ③ ablängen und entgraten.	
3. Press impulse tube into the threaded joint up to its stop. 4. Tighten union nut Torque 20 Nm.	3. Steuerleitung in die Verschraubung bis zum Anschlag drücken. 4. Überwurfmutter anziehen, Anzugsmoment 20 Nm.	

ENGLISH	DEUTSCH	
Insulation For medium temperatures up to 100 °C the pressure actuator ① may be insulated. **Dimensions, Weights** [2] Flanges: connection dimensions acc. to DIN 2501, seal form C.	**Isolierung** Bei Mediumstemperaturen bis 100 °C kann auch der Druckantrieb ① isoliert werden. **Abmessungen, Gewichte** [2] Flansche Anschluss-maße nach DIN 2501, Dichtleiste Form C.	

AID



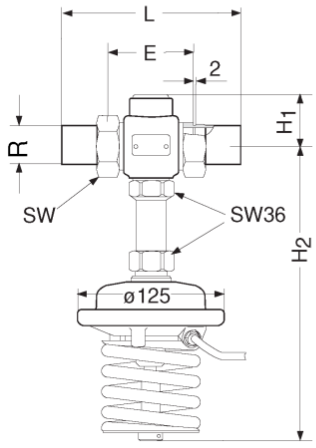


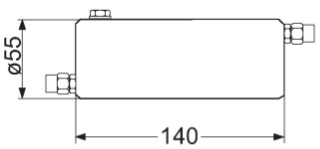


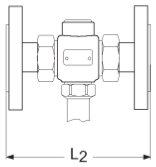
DN		15	20	25	32	40	50
R [1]		1/2	3/4	1	-	-	-
G		3/4A	1A	1 1/4A	-	-	-
SW	mm	32	41	50	-	-	-
d		21	26	33	-	-	-
E		65	70	75	-	-	-
L		139	154	159	-	-	-
L1		125	146	169	-	-	-
L2 [2]		130	150	160	180	200	230
H1		57	64	64	57	62	62
H (1-5 bar)	mm	210	216	216	246	250	250
Weight	kg	3.7	4.0	4.2	9.2	11.7	12.7
H (3-12 bar)	mm	265	271	271	301	305	305
Weight	kg	5.2	5.5	5.7	10.7	13.2	14.2

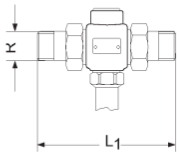
[1] DIN 2999

AISD









DN		15	20	25
R [1]		1/2	3/4	1
SW		32	41	50
d	mm	21	26	33
E		65	70	75
L		139	154	159
L1		125	146	169
L2 [2]		130	150	160
H1		37	44	44
H2 (1-5 bar)	mm	279	285	285
Weight	kg	3.7	4.0	4.2
H2 (3-12 bar)	mm	334	340	340
Weight	kg	5.2	5.5	5.7

[1] DIN 2999

ENGLISH

Leak and Pressure Tests

Prior the pressure tests, it is **absolutely** necessary to remove the impulse tube ①.

Close connections with plugs G 1/8 ISO 228.

Max testing pressure is 1,5 * PN 25 = 37,5 bar

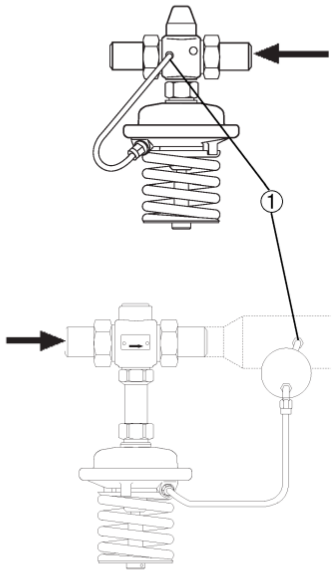
DEUTSCH

Dichtheits-, Druckprüfung

Vor Druckprüfungen die Steuerleitung ① unbedingt entfernen.

Die Anschlüsse mit Stopfen G 1/8 ISO 228 schließen.

Max. Prüfdruck ist 1,5 x PN 25 = 37,5 bar



ENGLISH

Filling the System, First Start-up

1. Open shut-off valve at the impulse tube, if any.
2. Slowly open shut-off units ① ②.

Putting out of Operation

1. Slowly close shut-off unit ① (inlet).
2. Slowly close shut-off unit ② (outlet).

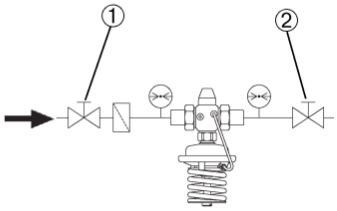
DEUTSCH

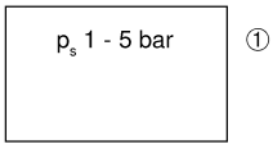
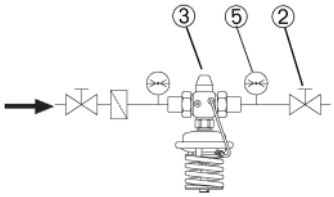
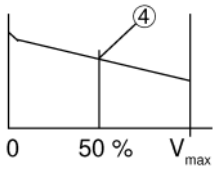
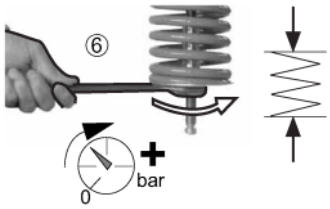
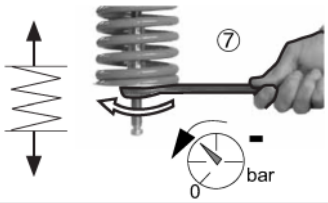
Füllung der Anlage, Inbetriebnahme

1. Falls vorhanden, Absperrventil in der Steuerleitung öffnen.
2. Absperrarmaturen ① ② langsam öffnen.

Außerbetriebnahme

1. Absperrarmatur ① (Eingang) langsam schließen.
2. Absperrarmatur ② (Ausgang) langsam schließen.



ENGLISH	DEUTSCH	
Setpoint Adjustment Set-point range see rating plate ①.	**Sollwerteinstellung** Sollwertbereich siehe Typenschild ①.	
1. Adjust flow rate at a fitting ② after the pressure reducer ③ to about 50 % of the max. flow rate ④.	1. Volumenstrom an einer Armatur ② nach dem Druckminderer ③, auf ca. 50 % des max. Volumenstroms ④ ein-stellen.	
2. Adjustment of the **pressure behind the valve** ⑤:	2. Einstellung des **Druckes nach dem Ventil** ⑤:	
Turning to the right ⑥ increases the set-point (stressing the spring, tension spring)	Rechtsdrehung ⑥ erhöht den Sollwert. (Feder spannen, Druckfeder)	
Turning to the left ⑦ reduces the set-point (unstressing the spring)	Linksdrehung ⑦ reduziert den Sollwert. (Feder entspannen)	
3. The set-point adjuster ⑧ may be sealed.	3. Der Sollwertsteller ⑧ kann plombiert werden.	

Specifications:

- Product Name: Pressure reducer AID, AID-8 / AISD
- Models: AID DN 15 – 50 / AISD DN 15 – 25, AID DN 15 – 25, AID DN 32 – 50
- Application: Pressure reduction for water, water-glycol mixtures, and steam

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FAQ:

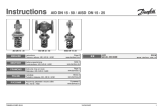
Q: What is the controller used for?

A: The controller is used for pressure reduction of water, water-glycol mixtures, and steam in heating, district heating, and cooling systems.

Q: Who should perform assembly and maintenance work?

A: Only qualified and authorized personnel should perform assembly, startup, and maintenance work on the pressure reducer.

Documents / Resources

	Danfoss AID DN 15 - 25 Pressure Reducer [pdf] Instructions AID DN 15 - 50, AID DN 15 - 25, AID DN 32 - 50, AID DN 15 - 25 Pressure Reducer, AID DN 15 - 25, Pressure Reducer, Reducer

References

- Danfoss France - économie d'énergie et solutions innovantes | Danfoss
- Engineering Tomorrow | Danfoss
- User Manual