



REMOTE ADJUSTABLE TYPE DIRECT-ACTING PRESSURE REDUCING VALVE FOR AIR

MODEL A-PN-DR STAINLESS STEEL

COMPACT STAINLESS STEEL REMOTELY ADJUSTABLE PNEUMATIC DIRECT-ACTING PRV

Features

Extremely compact pressure reducing valve for use on small process equipment requiring multiple secondary pressures.

1. Exceptionally light and compact PRV.
2. Wetted parts are of all stainless steel construction with high durability and corrosion resistance for long service life.
3. Secondary pressure can be set remotely using compressed air, and manually with adjustment handle.
4. Stable secondary pressure.
5. Capable of a 30:1 pressure reduction.
6. Built-in screen ensures extended trouble-free operation. For installation in horizontal piping (with adjustment handle facing up).

Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 15 to DN 25	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

* Manufactured in accordance with sound engineering practice



Specifications

Model	A-PN-DR-2TS	
Connection	Screwed	
Size	1/2", 3/4", 1"	
Maximum Operating Pressure (barg)	PMO	7
Maximum Operating Temperature (°C)	TMO	100
Primary Pressure Range (barg)	2 to 7	
Adjustable Pressure Range (barg)	0.14 to 2 but not less than 1/30 of primary pressure Secondary pressure must not exceed 90% of primary pressure	
Motive Medium	Oil-free air, filtered to 5 µm	
Air Supply Pressure Range (barg)	0 to 7	
Applicable Fluids*	Air, Nitrogen	
Minimum Adjustable Flow Rate (m³/h)	2	

* Do not use for toxic, flammable, or otherwise hazardous fluids.

1 bar = 0.1 MPa

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 20
Maximum Allowable Temperature (°C) TMA: 220
Minimum Allowable Temperature (°C): -40

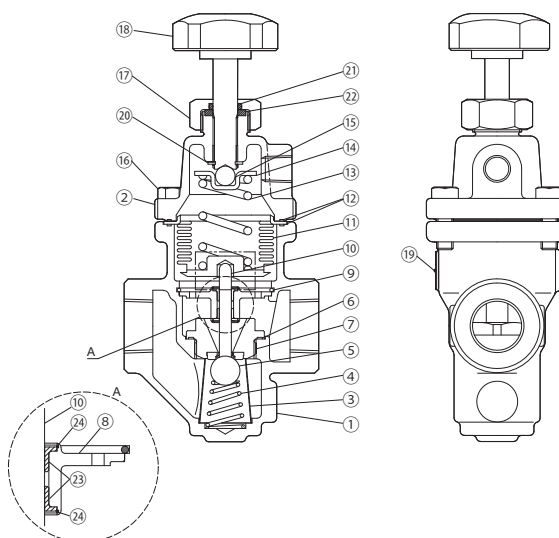


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	DIN	ASTM/AISI*
①	Body	Cast Stainless Steel A351 Gr.CF8	1.4312	—
②	Cover	Cast Stainless Steel A351 Gr.CF8	1.4312	—
③ ^V	Screen	Stainless Steel SUS430	1.4016	AISI430
④ ^V	Coil Spring	Stainless Steel SUS304	1.4301	AISI304
⑤ ^V	Steel Ball	Stainless Steel SUS304	1.4301	AISI304
⑥ ^{MV}	Valve Seat Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑦ ^V	Valve Seat	Stainless Steel SUS304/PTFE	1.4301/PTFE	AISI304/PTFE
⑧ ^S	Spacer	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑨	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑩ ^S	Valve Stem	Stainless Steel SUS303	1.4305	AISI303
⑪ ^B	Bellows	Stainless Steel SUS316L	1.4404	AISI316L
⑫ ^{MSVBH}	Cover Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑬	Coil Spring	Stainless Steel SUS304	1.4301	AISI304
⑭	Spring Guide	Carbon Steel SPCC	1.0330	A109
⑮	Steel Ball	Steel SUJ2	1.2067	A485
⑯	Cover Bolt	Stainless Steel SUS304	1.4301	AISI304
⑰	Holder nut	Stainless Steel SUS303	1.4305	AISI303
⑱ ^H	Adjustment Handle	Nylon/Stainless Steel SUS304	—/1.4301	—/AISI304
⑲	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑳ ^H	Retaining Ring	Stainless Steel SUS304	1.4301	AISI304
㉑ ^{MH}	Seal Ring	Fluorine Rubber FPM	—	D2000HK
㉒ ^{MH}	Gland Retainer	Fluorine Resin PTFE	—	—
㉓ ^S	Slide Bearing**	—	—	—
㉔ ^S	Snap Ring**	Stainless Steel SUS316	1.4301	AISI316

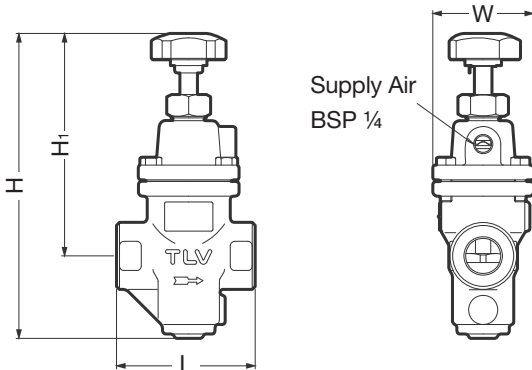
* Equivalent ** Incorporated with the spacer and must be replaced as a set with the spacer.

Replacement kits available: (M) maintenance parts, (S) repair parts for spacer, (V) repair parts for main valve, (B) repair parts for bellows, (H) repair parts for adjustment handle



Dimensions

● **A-PN-DR** Screwed

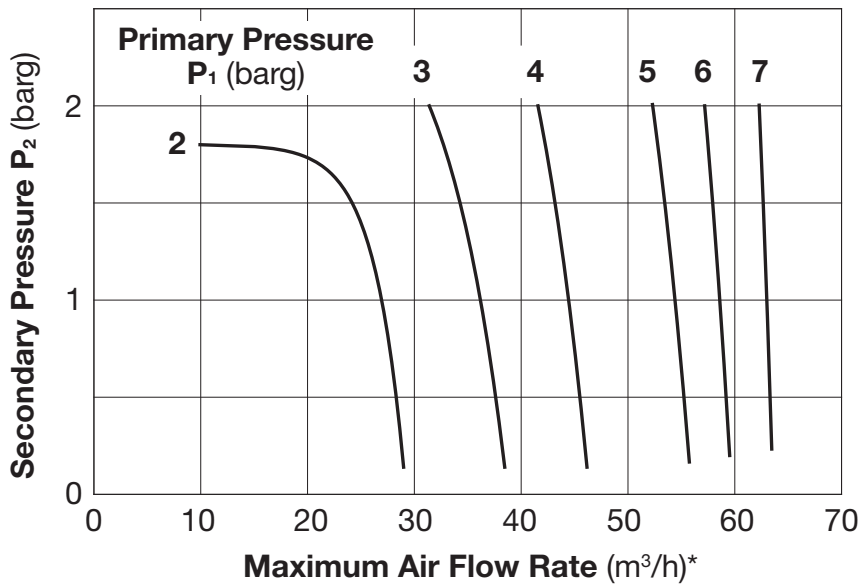


A-PN-DR Screwed* (mm)

Size	L	H**	H1**	W	Weight (kg)
1/2"	95	210	155	69	1.9
3/4"					1.8
1"					

* BSP DIN 2999, other standards available
 ** Approximate dimensions

Flow Graph



Maximum Cv & Kvs Values (when fully opened)

Size	1/2"	3/4"	1"
Kvs (DIN)		0.8	
Cv (UK)		0.8	
Cv (US)		1.0	

Cv & Kvs values are for maximum flow

Manufacturer
TLV CO., LTD.
 Kakogawa, Japan
 is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001
 ISO 14001

