

AIR-JET VALVES

SPACERS FOR AIR-JET VALVE / SPRING PINS & DOWEL PINS

Non JIS material definition is listed on P.1351 - 1352

RoHS

AJVE (Steel type)
AJV (Stainless Steel type)

Technical drawing showing dimensions and assembly details for AJVE and AJV valves.

No.	Item	AJVE		AJV		D	Ejection force N[kgf]	Spring pressure N[kgf]	Components	
		M	H	M	H				①	⑤
①	Socket head cap screw	SCM435	38~43HRC	SUS304	—	10	9.61(0.98)	4.81(0.49)	M 3-L 6	MSW3
②	Spring Washers	SWRH62	42~50HRC	SUS304	—	13	16.67(1.70)	8.34(0.85)	M 4-L 8	MSW3
③	Plain washer	SK5	—	SUS304	—	16	24.51(2.50)	12.26(1.25)	M 5-L10	MSW4
④	SPRINGS	SUS304	—	SUS304	—	20	38.25(3.90)	19.61(2.00)	M 6-L12	MSW4
⑤	Screw plug	SCM435	34~43HRC	SCM435	34~43HRC	25	64.72(6.60)	32.36(3.30)	M 8-L15	MSW5
⑥	Cylinder tube	S45C	33~38HRC	NAK101	35HRC	32	124.54(12.70)	63.74(6.50)	M10-L20	MSW6
⑦	Piston rod	S45C	33~38HRC	NAK101	35HRC					

(kgf)=NX0.101972

The screw plug ⑤ is used to fix the piston rod ⑦ when assembling/disassembling the air-jet valve.
Before mounting the air-jet valve on a mold, make sure to loosen the screw plug and check the piston rod movement.
 Periodically tighten the bolt ① in order to prevent the piston rod ⑦ from coming loose.
 Shown here are reference values of ejection force when the air pressure is 49N/cm²[500kPa].
 When using the air-jet valve, set the air pressure at 49N/cm²[500kPa] or higher.

S	E	ℓ_1	ℓ_2	ℓ_3	d_1	d_2	H	B	A	Part Number		L			
										Type	D	AJVE (Selection)	AJV 1mm increments		
1.5	7	12	10.5	8.5	8.5	6.5	15	3	7.5	AJVE (Steel type)	10	20 25 30 35	19~35		
1.5	8	15	14	11	10.5	8.5	18	4	9		13	25 30 35 40	25~40		
2.5	10	15	16	12	12.5	10.5	21	4	11	AJV (Stainless type)	16	30 40 50	28~50		
3.0	12	20	21	15	16	13	25	6	14		20	40 50 60	36~60		
3.0	12	20	26	18	19	16	32	6	18		25	50 60 70	44~70		
5.0	15	25	35	20	25	22	40	8	25		32	70 80	55~80		

Please select AJV (stainless type) for resin with high liquidity when you select the material, and select AJVE (steel type) for resin with low liquidity.

Order Part Number — L
AJVE 20 — 60
AJV 20 — 38

Price Quotation

Example

Days to Ship Quotation

Alterations Part Number — L(LC) — (KC · JC · AC)
AJVE 20 — LC(LC) — KC

Quotation

Alterations	Code	Spec.	1Code
	KC		(⑥ Adds a key flat on the cylinder tube.)
	JC		(⑥ Adds a spacer connecting slot onto the cylinder tube.)
	AC		(③ Adds a hole on the plain washer.)
	LC		(⑥ Total length alteration 1mm increments Lmin.≤LC<L Available for AJVE only.)

Quotation

• Recommended spring pins & dowel pins

Head thickness of ejector pins in NC alteration	4mm	6 · 8mm	10mm
Spring pin (WSP)	WSP2	WSP3	WSP4
Dowel pin (MS)	MS2	MS3	MS4

RoHS

AJVS (Spacers for Air-jet Valve)

Technical drawing showing dimensions and cross-sections for AJVS spacers.

d	H	Part Number Type	No.	L	U/Price 1~9
8.5	15	AJVS	10	10~100	L10~50 L51~100
10.5	18		13		
10.5	21		16		
13	25		20		
16	32		25		
25	40		32		

Order Part Number — L
AJVS 10 — 53

Days to Ship Quotation

Price Quotation

Alterations Part Number — L — (KC · JC)
AJVS 16 — 85 — KC

Quotation

Example By making a unit with the air-jet valve, you can avoid major machining work; no more than a simple boring process on the mold plane will be required.

Opening the valve with air allows:

1. Vacuum breaking
2. Air blowing
3. Preliminary ejection

Spacer(AJVS) AJV

RoHS

WSP (Spring Pins chamfered both ends (W type))

Technical drawing showing dimensions and cross-sections for WSP pins.

The detailed specifications of dowel pins P.1203

E _{max}	*kN(kgf)	t _{Reference}	L	D	Part Number	U/Price	Slide unit price
1.9	2.76(281)	0.4	8	2.15(2.25	2	1~299	300~499 500~1999 2000~4000
2.9	6.20(633)	0.6	10	3.15(3.25	3		
3.9	10.80(1130)	0.8	10	4.2(4.4	4		

The maximum value of L is the maximum value on the pin's circumference; its minimum value is the average of D₁, D₂ and D₃. Reference Value t is in accordance with JSMA No.6 (Standards of Japan Spring Manufacturers Association)

*The minimum load of double shearing (JIS B2808)

Order Part Number — L
WSP 2 MS 3 — 15

Days to Ship Quotation

• Recommended spring pins & dowel pins

Head thickness of ejector pins in NC alteration	4mm	6 · 8mm	10mm
Spring pin (WSP)	WSP2	WSP3	WSP4
Dowel pin (MS)	MS2	MS3	MS4

Quotation

Example WSP · MS

Ejector pins