702
703
704

NEO-PINCH VALVES

Fluid is perfectly controlled by the elasticity of a special rubber sleeve.

The valve is opened and closed easily when the powerful special rubber sleeve located inside it is pressed.This is a straight through-type slurry valve of the simplest compact structure.

This valve has an ultra-long life, ensures ease of maintenance with no pressure loss, and is suitable for handling fluids, such as sludge, ore slurry, cement, powder, pulp, and sewer sludge.

The valve perfectly seals off the flow of fluid and is not affected by the penetration of solid matters.

Operation Principles

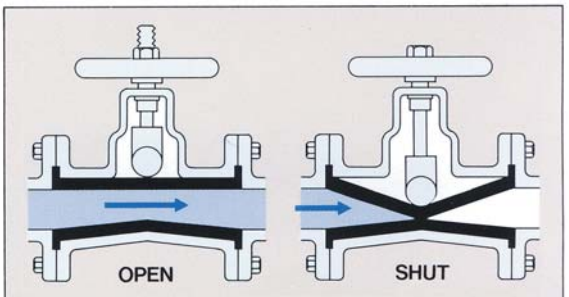
OKM's Neo Pinch Valves are classified into the 704 and 703 models, which are of air-pressurized operation type, and the 702 model, which is of manual operation type. The respective operation principles of these models are shown below.

702

703

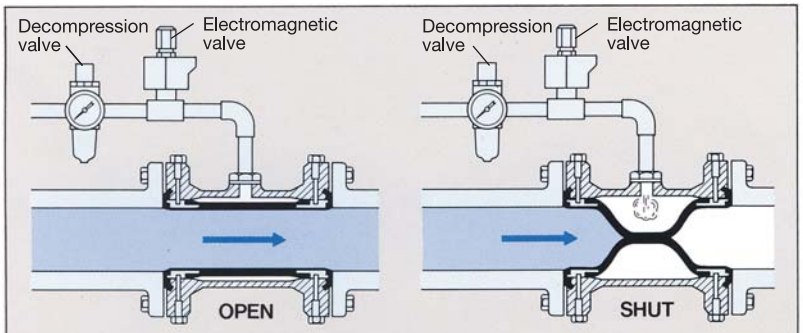
704

Manual (702)



The rubber sleeve will be pressed to control the fluid when the clamp is operated with the manual handwheel.

Air pressurization (704 / 703)



The rubber sleeve will be pressed to control the fluid when an operation air pressure 0.20 to 0.29 MPa higher than the pressure of the fluid is applied to the valve.

Standard Specifications

Model	Size(mm)	Max.Service Pressure	Max.Service Temperature	Sleeve Material	Body Material	Face To Face	Action type
704	25 to 100	0.4MPa	-10 to 80℃	CR	FC250	JIS10K	Air pressurization
703	125,150	0.3MPa	-10 to 80℃	CR , NR	FC250	JIS10K	
	200	0.2MPa					
702	25 to 300	0.5MPa	-10 to 80℃	CR , NR	FC250	JIS10K	Manual※

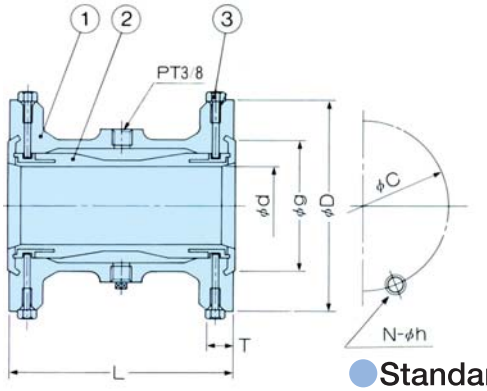
◆Operating conditions may vary with the fluid specifications. Contact your OKM representative.

※cylinder or motor driving available as well)

704 703

Fluid under the perfect remote control of air pressurization.

- The 704 and 703 models are compact automatic valves that can be under remote control by mounting an electromagnetic valve and decompression valve to each model provided with air piping. An operation air pressure 0.20 to 0.29 MPa higher than the pressure of the fluid makes it possible to open and close the valve with ease.
- Each valve is operable semipermanently with the rubber sleeve replaced periodically.
- The elasticity of the rubber sleeve will perfectly shut off the fluid if a solid matter is caught by the valve.
- The rubber sleeve made of a special molding compound ensures high durability.



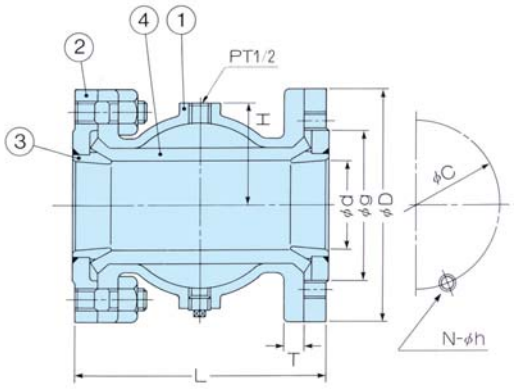
Standard Materials

No.	Part Name	Material
1	Body	FC250
2	Sleeve	CR
3	Stopper Bolt	SUS304

Dimensions

	Nominal Size inch	Nominal Size mm	d	g	D	L	T	C	N	h	Weight
704	1	25	27	63	125	160	18	90	4	M16	4.6
	1½	40	40	75	140	160	20	105	4	M16	5.9
	2	50	50	90	155	170	20	120	4	M16	7.1
	2½	65	65	109	175	185	22	140	4	M16	9.7
	3	80	80	121	185	230	22	150	8	M16	11.8
	4	100	98	147	210	285	24	175	8	M16	16.8

(Size : mm , Weight : kg)



Standard Materials

No.	Part Name	Material
1	Body	FC250
2	Flange	SS400
3	Bushing	SUS304
4	Sleeve	NR · CR

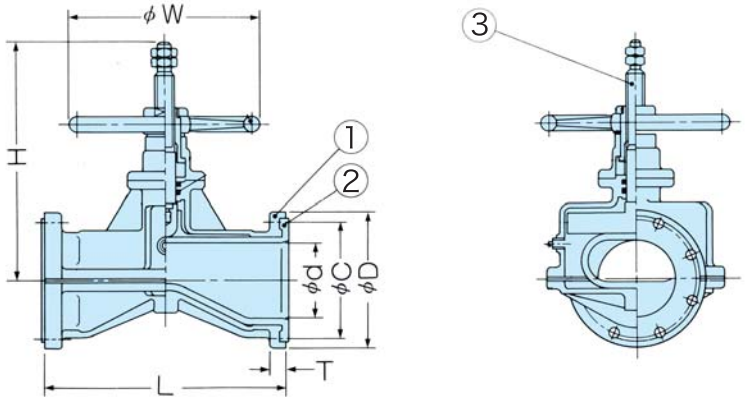
Dimensions

	Nominal Size inch	Nominal Size mm	d	g	D	L	T	C	N	h	Weight
703	5	125	125	185	280	350	24	210	8	M20	54.0
	6	150	150	215	330	420	26	240	8	M20	84.0
	8	200	200	260	400	555	26	290	12	M20	126.0

(Size : mm , Weight : kg)

702

- The 702 model has a rubber sleeve covered with rigid cast iron, thus ensuring high durability.
- The rubber sleeve can be replaced with ease by removing the tightening bolts of the valve body.
- The 702 Series provides two types of models, i.e., the 702-C model, which is driven by an air cylinder, and the 702-M model, which is driven by a motor. Contact your OKM representative for details.



Standard Materials

No.	Part Name	Material
1	Body	FC250
2	Sleeve	NR · C R
3	Stem	SUS403

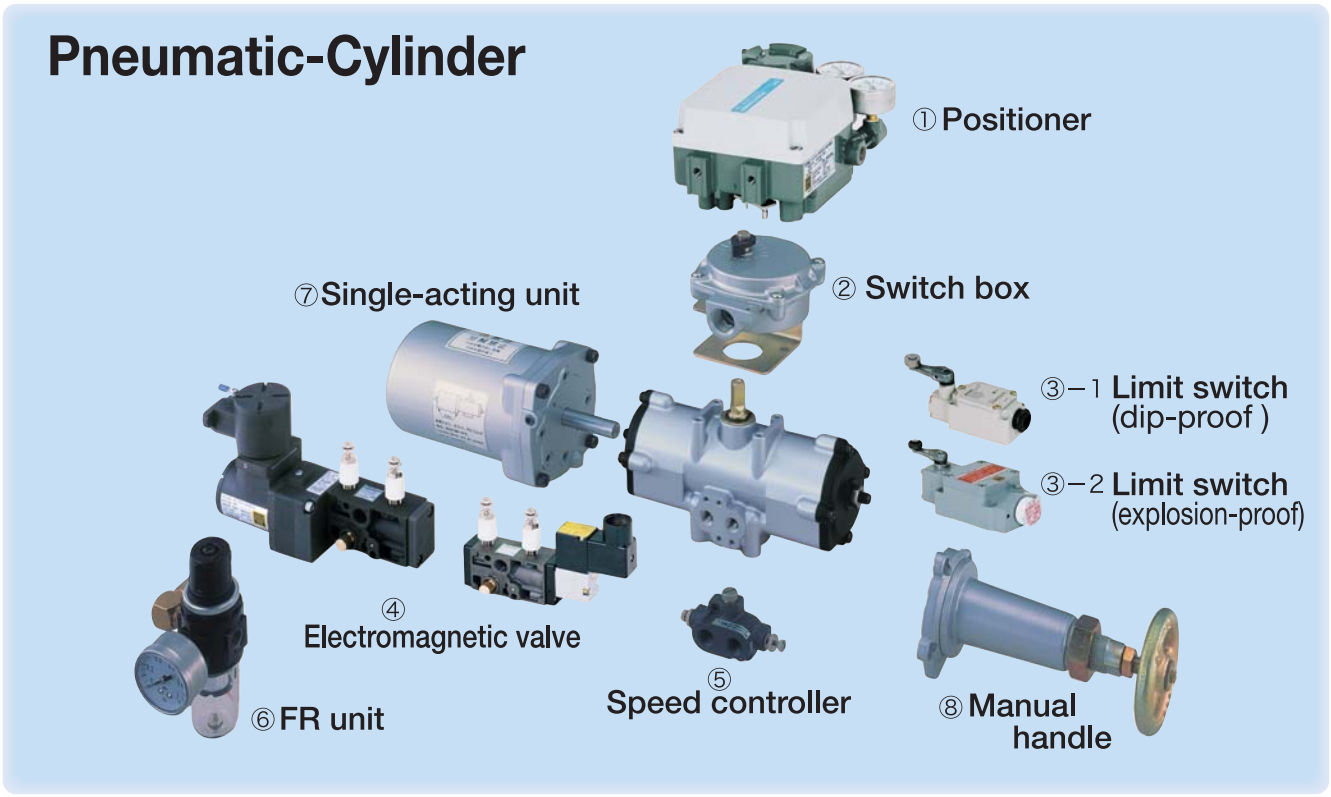
Dimensions

Nominal Size inch	Nominal Size mm	702 L	H	D	C	T	W	Weight
1	25	149	202	125	90	16	160	10
1 ½	40	184	247	140	105	18	180	14
2	50	211	269	155	120	18	180	18
2 ½	65	260	324	175	140	18	200	23
3	80	289	363	185	150	18	224	31
4	100	338	421	210	175	20	280	41
5	125	407	446.5	250	210	22	315	55
6	150	480	496	280	240	32	400	78
8	200	655	650	330	290	34	400	140
10	250	785	846	400	355	34	355	228
12	300	935	914	445	400	40	355	355

(Size : mm , Weight : kg)

※Actuators of 250 to 350mm is Worm-Gear Type

Pneumatic-Cylinder Option List



	Name of accessory	U s e
①	**Positioner** (electropneumatic and pneumatic)	A positioning device for flexible control of the opening and closing of the valve.
②	**Switch box**	A device to detect the opening and closing position of the valve. (A switch box cannot be installed if the valve is fitted with a positioner.)
③	**Limit switch** (dip-proof and explosion-proof)	A device to detect the opening and closing position of the valve.
④	**Electromagnetic valve** Speed controller with silencer (conforms to NAMUR standards) (dip-proof single) (explosion-proof single)	A device to change the flow of air using electric signals to open and close the valve.
⑤	**Speed controller equipped** with bypass valve	A device to set and adjust the opening and closing speed of the valve.(This differs in type from the single-acting speed controller.)
⑥	**FR unit** (filter regulator)	A device that constantly controls and purifies the air supply.
⑦	**Single-acting unit**	A device with a built-in spring to change the double-acting type to the single-acting type.
⑧	**Manual handle**	A device to manually open and close the valve of the single-acting cylinder.

* Other devices, such as proximity switches, quick exhaust valves, electromagnetic (double solenoid) valves, lockup valves, booster relays, opening adjustment bolts, and manual gears, are also available.

Electric-Motor Standard Specs

Electric-Motor

■ Expansion of cable connection port

The number of cable connection jacks has been expanded to three, which are suitable to almost all cable modules.

■ Reliable self-lock function

The self-lock function withstands unbalanced torque that results from the flow of fluid and attempts to turn the valve shaft, thus always properly maintaining the valve shaft.

■ Mechanical stopper

A position adjustable mechanical stopper is provided at both the opening and closing ends, thus preventing the valve body from overrunning.

■ Adoption of PCB

A PCB is built in for control, which allows optional devices to be added easily.

Electric-Motor Standard Specs

Model			CRV-05A	CRV-10A	CRV-20A	CRV-40A	CRV-60A
Set output torque (N·m)			□ 40	□ 50 □ 85	□ 160	□ 320	□ 450 □ 530
Switching time (sec) 90 °			43	26	26	29	29
Output axial rotation angle			□ 70° ／ □ 90°				
Manual operation	Operation part		Handle (with clutch)			Detachable lever (without clutch)	
	Rotating speed (Rotation) 90°		9	18	18	11	11
Opening indicator			4-division scale 90°	4-division scale / 70° or 90°			
Conduit tube connection			G3／4 1points	G1／2 2points , G3／4 1points			
Terminal block			M3.5 screw				
Motor	Voltage		□ AC110V±10% 60Hz 1φ ／ □ AC220V±10% 60Hz 1φ				
	Output (W)		6	25	25	40	60
	Rated current (A)	100V	0.28	0.8	0.8	1.3	2.0
		200V	0.14	0.5	0.5	0.8	1.0
	Locked rotor current (A)	100V	0.45	1.5	1.5	2.2	3.1
		200V	1.23	0.8	0.8	1.2	1.8
	Insulation		Type E				
	Time rating		30min				
	Protection		With built-in thermal protector (120℃±10℃)				
Space heater	Power capacity		5W	20W			
	Power consumption		3W	5W			
Limit switch	Position		1 piece each for opening and closing sides (Closing side – for outputting overload abnormal signals)				
	Torque		2 pieces for closing side (1 piece – for outputting overload abnormal signals)				
Protective structure			IP66				
Ambient temperature			-10℃ to 60℃				
Ambient humidity			30 to 85% RH				
Vibration resistance			JIS C 60068-2-6 2G (0.75G with continuous vibration)				
Shock resistance			JIS C 60068-2-27 10G				
Mounting position			From upright to horizontal				
Dielectric strength			AC1500V / 1min				
Lubrication			Grease				
Coating			Body : Munsell 6.0Y8.3/0.6 Front part : Munsell 6.5PB6.7/7.3				
Weight			4.5Kg	11Kg	11Kg	14Kg	14Kg
Option			With limit switch (standerd), Non Option	□ Potentiometer :□ 0~300Ω , □ 0~135Ω □ Intermediate limit switch :□ For standard load □ For small load 1 piece each for opening and closing sides ※1			

※ When an intermediate limit switch is used in a small load circuit, please designate the limit switch for small load (gold contact type).