Direct acting 2, 3-port valve
(pinch valve for high purity fluids)

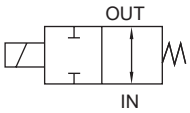
HYN Series

- NO, NC, universal
- Working fluid: Water/pure water/chemical liquids
- Tube attachment/removal method, compatible tube: ø3×ø1, ø5×ø3, ø8×ø6

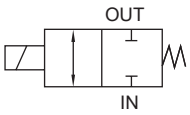
RoHS CAD

JIS symbol

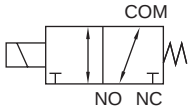
- 2-port valve
  : NO



- 2-port valve
  : NC



- 3-port
  : Universal



Common specifications

Item	HYN-3		HYN-5		HYN-8	
	AC	DC	AC	DC	AC	DC
Working fluid	Water/pure water/chemical liquids (fluids that do not corrode wetted part materials)					
Working pressure MPa	0 to 0.05 (refer to working pressure in individual specifications.)					
Fluid temperature °C	5 to 50					
Ambient temperature°C	0 to 40 (no freezing)					
Frequency cycles/min.	60 or less					
Mounting orientation	Unrestricted (*1)					
Electrical specifications						
Rating	Continuous	Continuous	Intermittent (*2)	Continuous	Intermittent (*2)	Continuous
Rated voltage	100V (50/60 Hz)	12V 24V	100 (50/60 Hz)	12V 24V	100 (50/60 Hz)	12V 24V
Voltage fluctuation range	±10%					
Leakage current mA	2 or less (*3)					

*1: Avoid vertical mounting with the coil down to prevent fluid intrusion into the coil during abnormalities such as tube rupture.
*2: When using intermittent rating, keep the max. continuous power ON time within 10 minutes and the DUTY ratio one half or less.
*3: The leakage current from the control circuit must be equal to or less than the values shown in the table.
*4: For tightening torque of the mounting screw, refer to the recommended tightening torque below.
Recommended tightening torque: HYN-3 0.2 to 0.4N·m, HYN-5, 8 0.5 to 0.7N·m
*5: The performance may not be satisfied if a tube other than the recommended ones is used.
*6: When starting and switching retention, noise is generated temporarily. Check the compatibility of the control circuit.
*7: Solenoid valve has polarity. Connect the red lead wire to the plus (+) side.
*8: After the solenoid valve is completely switched ON or OFF, set an interval of 0.5 seconds or more before switching it the next time.
*9: Make sure to read the safety precautions on pages 3 to 8 before use.

Individual specifications

Item / Model No.	Compatible tube (*1) (silicone tube)	Working pressure (MPa)	Power consumption 12/24 VDC (w)		Max. current 100 VAC (A)		Heat resistance Class	Weight (kg)
			Starting (*2))	Holding	Starting (*2))	Holding		
HYN-3	ø3×ø1	0 to 0.05	15	4	0.26	0.06	Class 120 (E)	0.18
HYN-5	ø5×ø3		30	8	0.55	0.14	Class 130 (B)	0.36
HYN-8	ø8 x ø6	0 to 0.02	30	8				0.37

*1: Use the recommended tubes below.
*2: Time from energizing to 200 ms.

Tube model No.	Tube size (O.D.) x (I.D.) x (length)
HYN-3-1-5000	ø3×ø1×5m
HYN-5-3-5000	ø5×ø3×5m
HYN-8-6-5000	ø8×ø6×5m

How to order

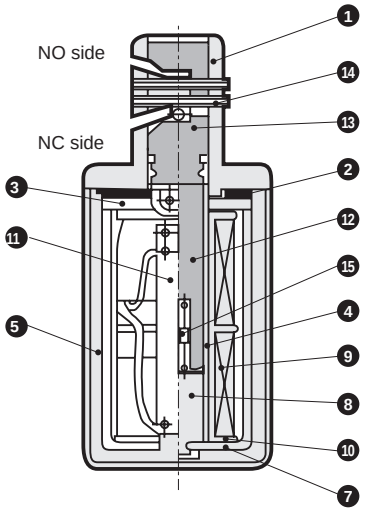
HYN – 3 – DC12V

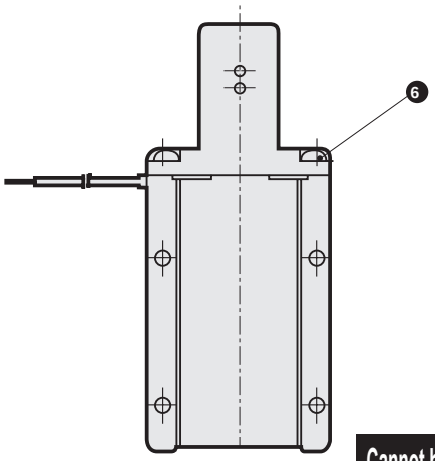
- HYN: Model No.
- 3: Ⓐ Tube used
- DC12V: Ⓑ Rated voltage

Code	Description
Ⓐ Tube used	
3	ø3×ø1
5	ø5×ø3
8	ø8 x ø6
Ⓑ Rated voltage	
AC100V	100 VAC (50/60 Hz)
DC12V	12 VDC
DC24V	24 VDC

Internal structure and parts list

● HYN



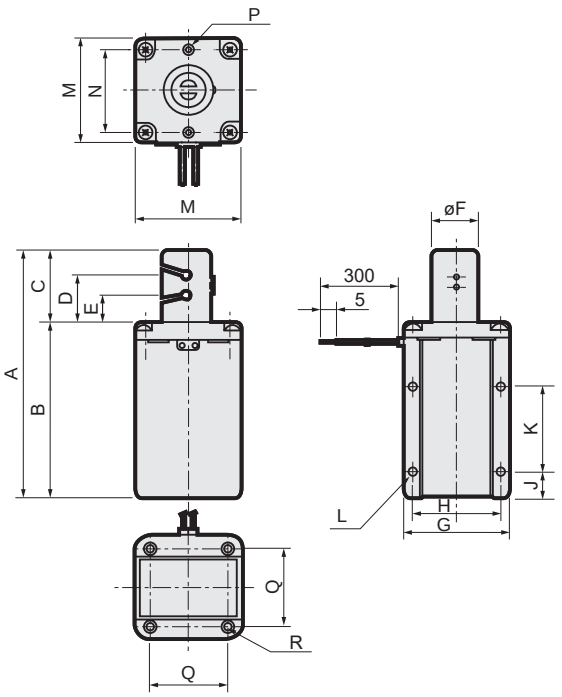


Cannot be disassembled

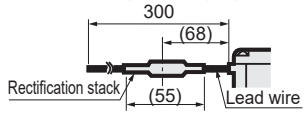
Part No.	Part name	Material		Part No.	Part name	Material	
1	Valve A	POM	Acetal resin	9	Coil	–	–
2	Packing	NBR	Nitrile rubber	10	Bobbin	PET	Polyethylene
3	Frame B	SPC	Steel	11	Wiring section assembly	–	–
4	Plunger guide	C2700	Copper	12	Plunger	SUS405	Stainless steel
5	Cover	PA	Polyamide	13	Valve B	POM	Polyacetal resin
6	Tapping screw	SUS304	Stainless steel	14	Spring pin	SUS420	Stainless steel
7	Frame A	SPC	Steel	15	Return spring	SUS304	Stainless steel
8	Stopper	SUS405	Stainless steel				

Dimensions CAD

● HYN



● For alternating current (AC)



The alternating current (AC) type has a rectification stack assembled into the lead wire.

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
HYN-3	81.5	57.5	24	17	10	16	34	28	9	28	4×M3 depth 7	34	28	2×M3 depth 5	-	-
HYN-5	98	65	33	23	13	25	43	36.5	11	36.5	4×M4 depth 7	43	-	-	36.5	4×M4 depth 7
HYN-8	103	65	38	27	14	30	43	36.5	11	36.5	4×M4 depth 7	43	-	-	36.5	4×M4 depth 7