



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

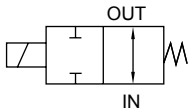
# HYN Series

- NO (closed when energized), NC (open when energized), universal
- Working fluid: Water/pure water/chemical liquids
- Removable tube, compatible tube:  $\varnothing 3 \times \varnothing 1$ ,  $\varnothing 5 \times \varnothing 3$ ,  $\varnothing 8 \times \varnothing 6$

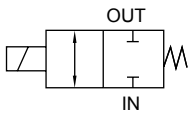


## JIS symbol

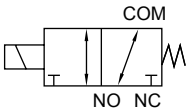
- 2-port valve  
: NO (closed when energized)



- 2-port valve  
: NC (open when energized)



- 3-port  
: Universal



## Common specifications

1 MPa  $\approx$  145.0 psi, 1 MPa = 10 bar

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 the working pressure in the individual specifications.)					
Fluid temperature °C	5 (41°F) to 50 (122°F)					
Ambient temperature °C	0 (32°F) to 40 (104°F) (no freezing)					
Frequency Cycle/min.	60 or less					
Mounting orientation	Unrestricted (*1)					
<b>Electrical specifications</b>						
Rating	Continuous	Continuous	Intermittent (*2)	Continuous	Intermittent (*2)	Continuous
Rated voltage	100 V (50/60 Hz)	12 V 24 V	100 (50/60 Hz)	12 V 24 V	100 (50/60 Hz)	12 V 24 V
Voltage fluctuation range	$\pm 10\%$					
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 set screw, refer to the recommended tightening torque below.  
Recommended tightening torque: HYN-3: 0.2 to 0.4 N·m, HYN-5, 8: 0.5 to 0.7 N·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.

## Individual specifications

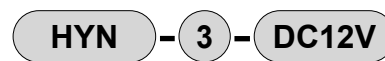
1 MPa  $\approx$  145.0 psi, 1 MPa = 10 bar

Item	Compatible tube (*1) (silicone tube)	Working pressure (MPa)	Power consumption 12/24 VDC (w)		Max. current 100 VAC (A)		Thermal class	Weight (kg)
			Starting (*2)	Holding	Starting (*2)	Holding		
HYN-3	$\varnothing 3 \times \varnothing 1$	0 to 0.05	15	4	0.26	0.06	Class 120 (E)	0.18
HYN-5	$\varnothing 5 \times \varnothing 3$		30	8	0.55	0.14		
HYN-8	$\varnothing 8 \times \varnothing 6$	0 to 0.02	30	8				Class 130 (B)

- \*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-3-1-1000	$\varnothing 3 \times \varnothing 1 \times 1$ m
HYN-3-1-5000	$\varnothing 3 \times \varnothing 1 \times 5$ m
HYN-5-3-1000	$\varnothing 5 \times \varnothing 3 \times 1$ m
HYN-5-3-5000	$\varnothing 5 \times \varnothing 3 \times 5$ m
HYN-8-6-1000	$\varnothing 8 \times \varnothing 6 \times 1$ m
HYN-8-6-5000	$\varnothing 8 \times \varnothing 6 \times 5$ m

## How to order



Model No.

A Tube used

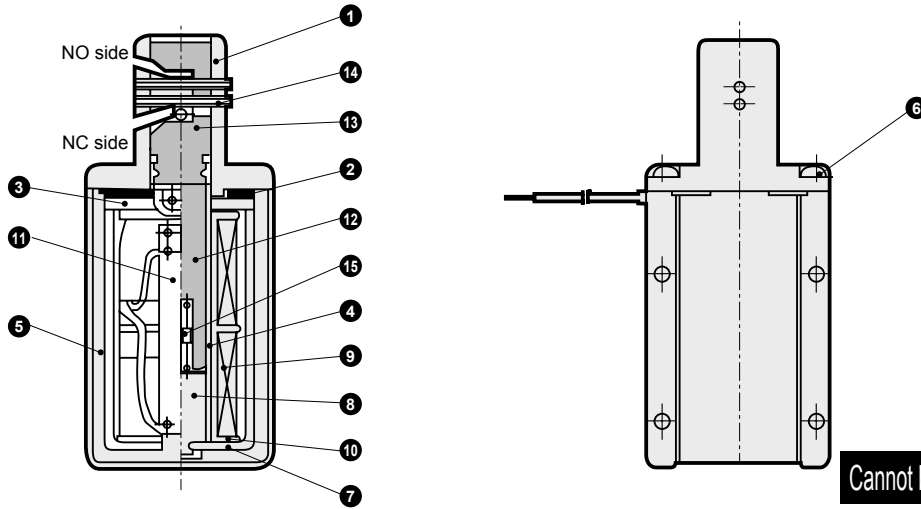
B Rated voltage

Code	Description
<b>A Tube used</b>	
3	$\varnothing 3 \times \varnothing 1$
5	$\varnothing 5 \times \varnothing 3$
8	$\varnothing 8 \times \varnothing 6$
<b>B Rated voltage</b>	
AC100V	100 VAC(50/60 Hz)
DC12V	12 VDC
DC24V	24 VDC

EXA  
FWD  
HNB/G  
USB/G  
FAB/G  
FGB/G  
FVB  
FWB/G  
FHB  
FLB  
AB  
AG  
AP/  
AD  
APK/  
ADK  
DryAir  
EX-  
XPLNprf  
XPLNprf  
HVB/  
HVL  
S  $\diamond$  B/  
NAB  
LAD/  
NAD  
Water-  
Rela  
NP/NAP/  
NVP  
SNP  
CHB/G  
MXB/G  
Other  
valves  
SWD/  
MWD  
DustColl  
CVE/  
CVSE  
CCH/  
CPE/D  
LifeSci  
Gas-  
Combus  
Auto-  
Water  
Outdoor  
SpecFld  
Custom  
Ending

## Internal structure and parts list

● HYN

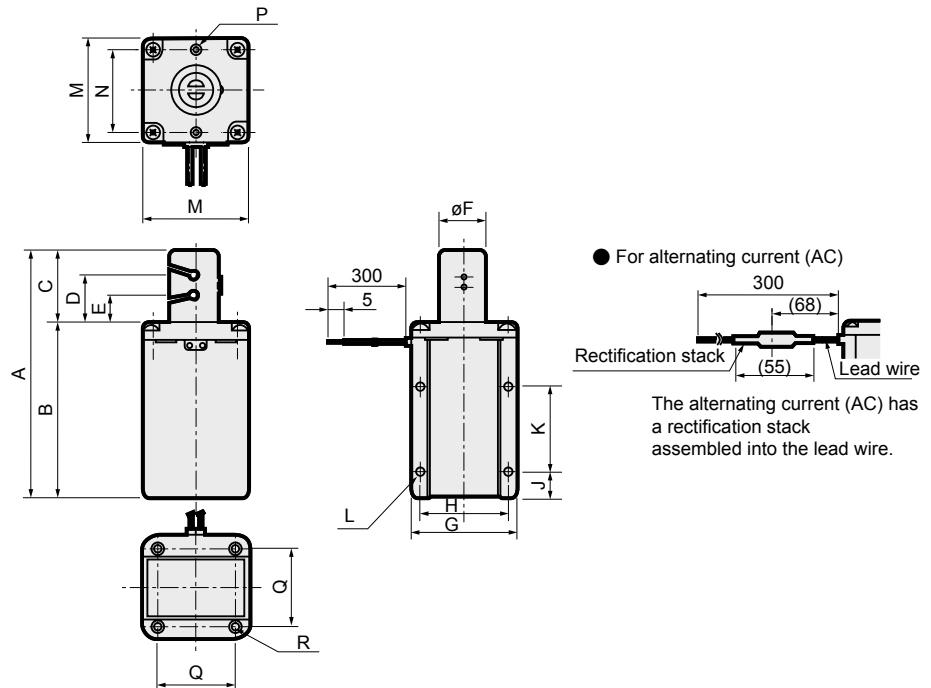


No.	Part name	Material	No.	Part name	Material
1	Valve A	POM Acetal resin	9	Coil	-
2	Packing	NBR Nitrile rubber	10	Bobbin	PET Polyethylene
3	Frame B	SPC Steel	11	Wiring section assembly	-
4	Plunger guide	C2700 Copper	12	Plunger	SUS405 Stainless steel
5	Cover	PA Polyamide	13	Valve B	POM Polyacetal resin
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



● HYN



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 x M3 depth 7	34	28	2 x M3 depth 5	-	-
HYN-5	98	65	33	23	13	25	43	36.5	11	36.5	4 x M4 depth 7	43	-	-	36.5	4 x M4 depth 7
HYN-8	103	65	38	27	14	30	43	36.5	11	36.5	4 x M4 depth 7	43	-	-	36.5	4 x M4 depth 7