



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

HYN Series

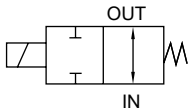
- NO, NC, universal
- Working fluid: Water/pure water/chemical liquids
- Removable tube, compatible tube

: $\varnothing 2 \times \varnothing 0.5$, $\varnothing 3 \times \varnothing 1$, $\varnothing 5 \times \varnothing 3$, $\varnothing 8 \times \varnothing 6$

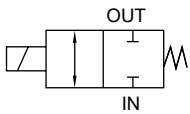


JIS symbol

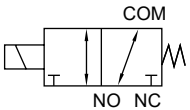
- 2-port valve
: NO



- 2-port valve
: NC



- 3-port
: Universal



Common specifications

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

Descriptions	HYN-2		HYN-3		HYN-5		HYN-8	
	AC	DC	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)							
Electrical specifications								
Rating	Continuous	Continuous	Continuous	Continuous	Intermittent (*2)	Continuous	Intermittent (*2)	Continuous
Rated voltage	100 V (50/60 Hz)	12 V 24 V	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-2, 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

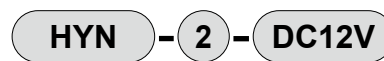
1 MPa \approx 145.0 psi, 1 MPa = 10 bar

Descriptions	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-2	$\varnothing 2 \times \varnothing 0.5$	0 to 0.05	3.6	3.6	0.06	0.06	Class 130 (B)	0.12
HYN-3	$\varnothing 3 \times \varnothing 1$		15	4	0.26		Class 120 (E)	0.18
HYN-5	$\varnothing 5 \times \varnothing 3$		30	8	0.55	0.14	Class 130 (B)	0.36
HYN-8	$\varnothing 8 \times \varnothing 6$	0 to 0.02	30	8				

- *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-2-0.5-1000	$\varnothing 2 \times \varnothing 0.5 \times 1$ m
HYN-2-0.5-5000	$\varnothing 2 \times \varnothing 0.5 \times 5$ m
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

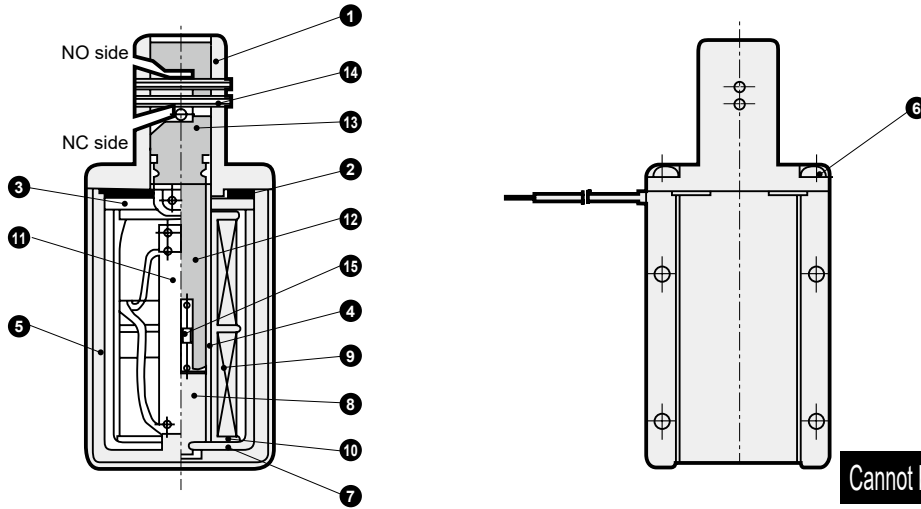
Code	Content
A Tube used	
2	$\varnothing 2 \times \varnothing 0.5$
3	$\varnothing 3 \times \varnothing 1$
5	$\varnothing 5 \times \varnothing 3$
8	$\varnothing 8 \times \varnothing 6$
B Rated voltage	
AC100V	100 VAC(50/60 Hz)
DC12V	12 VDC
DC24V	24 VDC

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 B/
NAB
LAD/
NAD
Water-
Rela-
NP/NAP/
NVP
SNP
CHB/G
MXB/G
Other
valves
SWD/
MWD
DustCoil
CVE/
CVSE
CCH/
CPE/D
LifeSci
Gas-
Combus
Auto-
Water
SpecFld
Custom
Ending

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
SAB/
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
SpecFld
Custom
Ending

Internal structure and parts list

● HYN

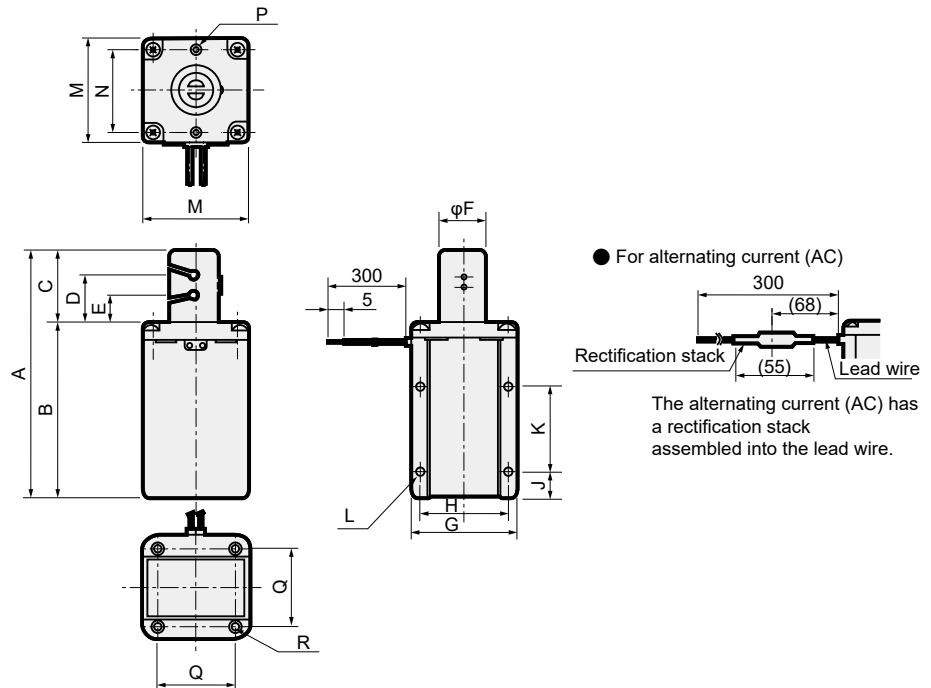


No.	Part name	Material	No.	Part name	Material
1	Valve A	POM Acetal resin	9	Coil	-
2	Packing	NBR Nitrile rubber	10	Bobbin	PET Polyethylene
3	Frame B	SPC Steel	11	Wiring section assembly	-
4	Plunger guide	C2700 Copper	12	Plunger	SUS405 Stainless steel
5	Cover	PA Polyamide	13	Valve B	POM Polyacetal resin
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-2	72.9	52.9	20	14.1	8.5	14	30	24	8	24	4 x M3 depth 7	30	24	2 x M3 depth 5	-	-
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