



Highly reliable cutoff valve ideal for main gas lines, with integrated motor/hydraulic pump.

Fluid operated 2-position cutoff valve **HK1 Series**

- NC (Open when energized)
- City gas/LPG
- Port size: Rp1 $\frac{1}{2}$, Rp2, Rp2 $\frac{1}{2}$ 40A to 80A(JIS flange)/100A to 200A(DIN flange)



Features

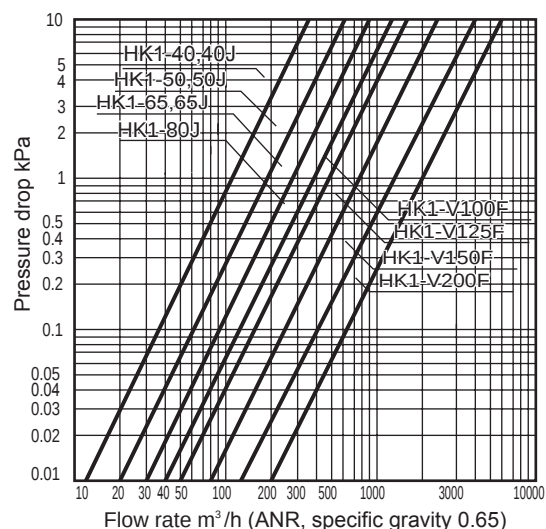
- 2-position shutdown valve with integrated motor and hydraulic pump
- Excellent performance in safe gas cutoff
- Reliable and long service-life actuator
- Indicator for checking valve open/close state
- Integrated strainer prevents foreign matter from being caught in pipes.
- With flow rate controller. For easy adjustment of calorie of gas (excluding bore sizes 125 A to 200 A)
- Pressure detection port on the body enables easy installation of the pressure switch and reduces cost for piping.
- Supplied terminal box makes wiring easier.

Specifications

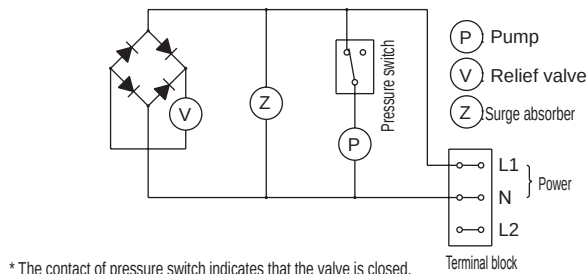
Item	HK1-40	HK1-40J	HK1-50	HK1-50J	HK1-65	HK1-65J	HK1-80J	HK1-V100F	HK1-V125F	HK1-V150F	HK1-V200F
Working fluid	City gas/LPG										
Working pressureMPa	0 to 0.4		0 to 0.25		0 to 0.2		0 to 0.14	0 to 0.1	0 to 0.06	0 to 0.04	0 to 0.023
Flow rate ^{Specific gravity of city gas 0.65 △P=0.25kPa} m ³ /h (ANR)	59		96		145		196	287	399	601	950
Cv	39		64		97		132	191	265	399	631
Rated voltage V	100 AC ±10% 200 AC ±10%										
Frequency Hz	Common to 50 and 60										
Power consumption	When valve is opening	120(100 VAC), 115(200 VAC)									
(apparent power) VA	When valve is held open	12									
Ambient temperature°C	-15 to +60 (no freezing)										
Opening time s	30 or less (ambient temperature 0 to 60°C, at rated voltage)										
Closing time s	1.0 or less										
Frequency cycles/min.	4 or less										
Flow rate adjustment%	0 to 100								Without flow rate controller		
Mounting orientation	Vertical direction with the actuator on the top or horizontal direction with the actuator terminal box side up										
Connection	Screw-in (Rp)	Flange (JIS10KRF)	Screw-in (Rp)	Flange (JIS10KRF)	Screw-in (Rp)	Flange (JIS10KRF)		Flange (DINPN16)			
Port size	11/2	40 A	2	50 A	21/2	65 A	80 A	100 A	125 A	150 A	200 A
Weight kg	9	21.5	9.2	10.7	12.7	14.3	15.3	19	24	32	52
Proof pressure MPa	0.6							0.2	0.12	0.08	0.05
Degree of protection	IP54 (IP21 or equivalent with HP terminal box)										

* Companion flange and gasket are supplied with DIN flange connection.

Flow characteristics



Electric circuit Fig.



Reference: conversion coefficient

Converted flow rate = (flow rate in table) x (coefficient)

Gas	City gas (13A)	Propane	Butane
Specific gravity (air = 1)	0.65	1.6	2.0
Coefficient	1.0	0.63	0.57

How to order

HK 1 - 40 - 3M S ZZ - AC100V

Model No.

A Model

B Port size

C Terminal box
*1

D Micro switch

E Outdoors
*1

F Voltage

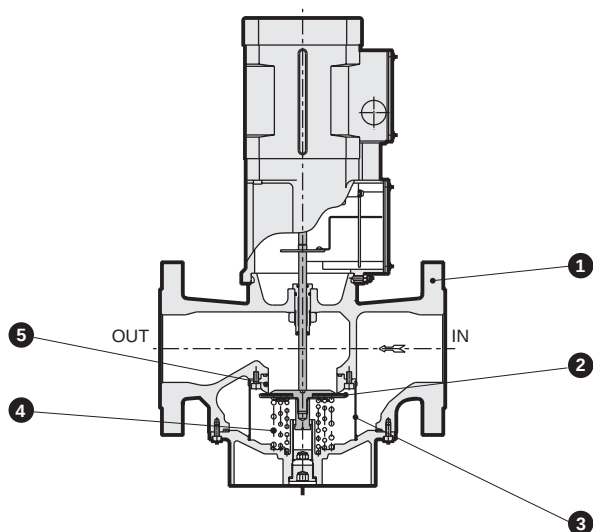
Code	Description	
A Model		
1	ON/OFF 2-position control	
1E	ON-OFF2 position control with micro switch	
B Port size		
40	Screw-in Rp1½	
50	Screw-in Rp2	
65	Screw-in Rp2½	
40J	JIS Flange 40A	
50J	JIS flange 50 A	
65J	JIS Flange 65A	
80J	JISFlange 80A	
V100F	DIN Flange 100A	
V125F	DIN Flange 125A	
V150F	DIN flange150A	
V200F	DIN Flange 200A	
C Terminal box		
Blank	No	
3M	HP terminal box (G1/2)	
D Micro switch		
Blank	When A is 1	Without micro switch
	When A is 1E	Valve opening confirmation macrosrossover switch
S	For A is 1E only	With valve closing confirmation micro switch
ES		With valve opening/closing confirmation micro switch
E Outdoors		
Blank	Standard	
ZZ	Outdoors	
F Voltage		
AC100V	100 VAC 50/60Hz	
AC200V	200 VAC 50/60HZ	

*1: For ZZ of E Outdoor specification, a round terminal box is automatically attached and 3M of C Terminal box cannot be selected.

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
SDB/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

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

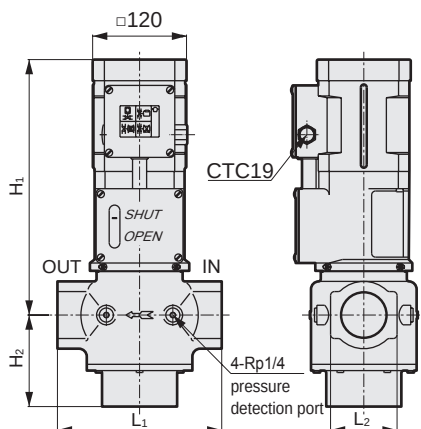


Cannot be disassembled

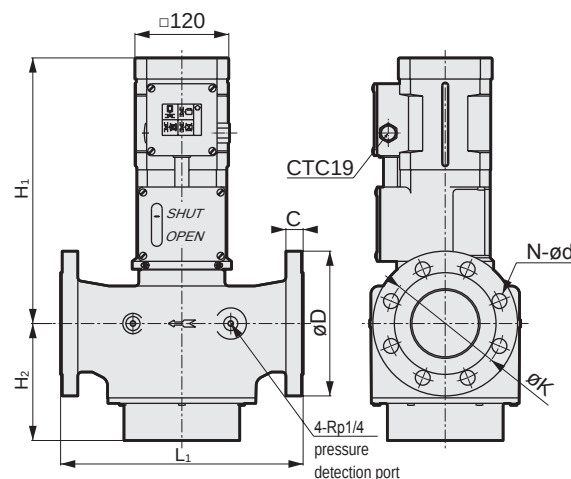
No.	Part name	Material
1	Body	Aluminum (except for 40J)
		Cast iron (40J)
2	Valve disc	Urethane rubber (40 to 80J)
		Nitrile rubber (V100F to V200F)
3	Filter	Stainless steel wire
4	Spring	Stainless steel wire
5	Valve seat	Aluminum

Dimensions

● HK1-40/50/65



● HK1-40J to 80J/V100F to V200F



Code	Connection	H ₁	H ₂	L ₁	L ₂	C	øD	øK	N-ød
Model No.									
HK1-40	Thread connection	324	114	210	70	-	-	-	-
HK1-50		327	117	210	85	-	-	-	-
HK1-65		337	140	310	100	-	-	-	-
HK1-40J	JIS flange connection	324	114	230	-	20	140	105	4-19
HK1-50J		327	117	230	-	20	155	120	4-19
HK1-65J		337	140	290	-	22	175	140	4-19
HK1-80J		340	150	310	-	22	185	150	8-19
HK1-V100F	DIN flange connection	400	163	350	-	24	229	180	8-18
HK1-V125F		450	158	400	-	26	250	210	8-18
HK1-V150F		445	173	480	-	26	285	240	8-23
HK1-V200F		475	218	600	-	30	340	295	12-23