



Wide angle hand Double acting/single acting

HDL Series

● Open and close angle: 0° to 180°



Specifications

Descriptions	HDL	
Size	3CS	4CS
Cylinder bore size mm	φ25	φ40
Actuation	Double acting/single acting	
Working fluid	Compressed air	
Max. working pressure MPa	0.7	
Min. working pressure MPa	0.3	
Ambient temperature °C	5 to 60	
Port size	M5	Rc1/8
Open angle Degree	0 to 180	
Rod diameter mm	φ14	φ16
Capacity of reciprocating cm³	7.8	53.2
Repeatability mm	±0.2	±0.1
Product weight kg	0.6	2.40
Lubrication	Not required (when lubricating, use turbine oil Class 1 ISO VG32)	

Switch specifications

Descriptions	Proximity 2 wire	Proximity 3 wire
	T2H/T2V	T3H/T3V
Applications	Programmable controller	Programmable controller, relay
Output method	-	NPN output
Power voltage	-	10 to 28 VDC
Load voltage/current	10 to 30 VDC, 5 to 20 mA (Note 1)	30 VDC or less, 100mA or less
Light	LED (ON lighting)	
Leakage current	1mA or less	10μA or less
Maximum shock resistance	980m/s²	
Lead wire	Standard 1m (oil resistant vinyl cabtire cable 2-conductor 0.2mm²)	Standard 1m (oil resistant vinyl cabtire cable 2-conductor 0.2mm²)

Note 1: Max. load current above: 20 mA at 25°C.

The current will be lower than 20mA if ambient temperature around switch is higher than 25°C. (5 to 10mA with 60°C)

How to order

Without switch

HDL - 3CS - O

With switch

HDL - 3CS - O - T2H - R

A Size

B Option

C Switch model no.

* indicates lead wire length.

D Switch quantity

Symbol	Descriptions			
A Size				
3CS				
4CS				
B Option				
Blank	Standard (double acting)			
O	Single acting (normally open)			
C	Single acting (normally closed)			
C Switch model no.				
Axial lead wire	Radial lead wire	Contact	Indicator	Lead wire
T2H*	T2V*	Proximity	1 color	2-wire
T3H*	T3V*		indicator type	3-wire
*Lead wire length				
Blank	1m (standard)			
3	3m (option)			
5	5m (option)			
D Switch quantity				
R	One on open side			
H	One on closed side			
D	Two			

<Example of model number>

HDL-3CS-O-T2H-R

Model: Wide angle hand

- A** Size : 3CS
- B** Option : Single acting, normally open type
- C** Switch model no.: Proximity T2H switch, lead wire 1m
- D** Switch quantity : One on open side

How to order switch

● For switch T*H*

· Switch body + mounting bracket

HDL - T2H

Switch model no.
(Item above ©)

· Switch body

SW - T2H

Switch model no.
(Item above ©)

· Mounting bracket

HDL - T

● For switch T*V*

· Switch body + mounting bracket

HDL - T2V - *

Switch model no.
(Item above ©)

· Switch body

SW - T2V

Switch model no.
(Item above ©)

· Mounting bracket

HDL - TV - *

(Select either R (open) or H (closed) for sections marked with an asterisk (*).)

RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/BHG
LHA
LHAG
HKP
HLA/HLB
HLAG/HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HLB
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 *-HC
CKH2
CKLB2
NCK/SCK/FCK
FJ
FK
Ending

Wide angle hand
Hand