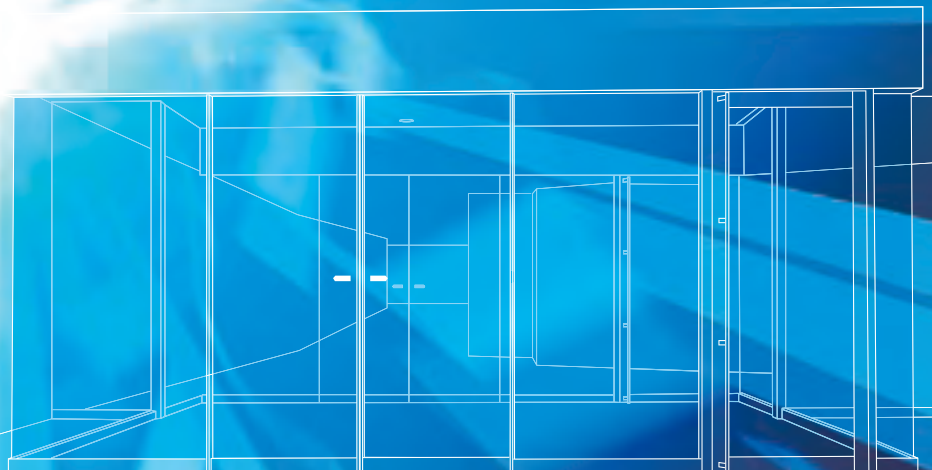


NET-DS System

Automatic Sliding Door Operator

**NABCO's Advanced Technology to
enhance comfort and safe operations of
automatic doors.**



For Pedestrians' safety and comfort

Idler pulley

with spring tensioner

Battery unit (option)

Door operation is available at power failure or in an emergency

Electric lock controller (option)

Door hanger

High durability and less noise are achieved by adopting aluminum rollers with urethane rubber coating

Aluminum rail base

Ensuring accurate assembly of equipment

Electric lock (option)

Fail-secure type or Fail-safe type

Timing belt

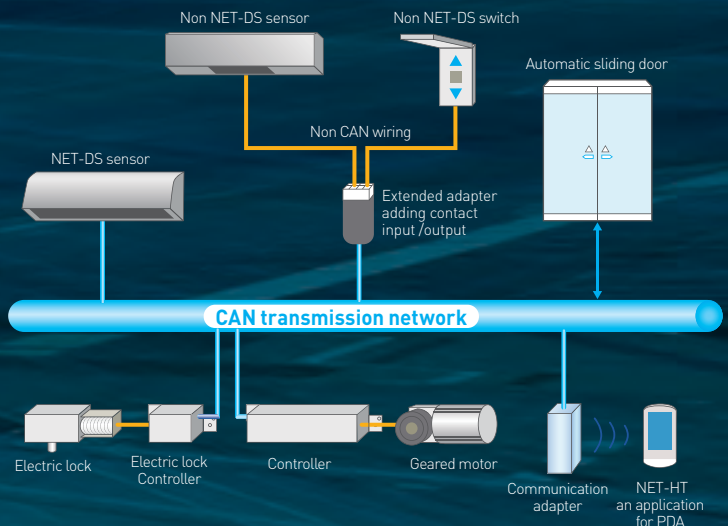
with low noise



NABCO NET-DS System

NABCO "NET-DS" is the advanced system of automatic door to provide the "complete entrance." "NET-DS" adopts CAN* transmission and PDA with the sophisticated application. Easier installation and maintenance together with upgraded functionality and higher safety are realized.

* CAN stands for Controller Area Network. It is a serial communication protocol standardized by ISO, and used in auto industry, etc. CAN has such features as "simple connection", "high reliability" and "real-time transmission."



Controller

Microcomputer equipped original software
Environment-friendly design including lead-free soldering
Various kinds of setting can be operated remotely
Applying for emergency-open or emergency-close (option)

Door stopper

Power switch module

On-off switch for maintenance
Connector for Communication adapter

Geared motor

Thermal protector equipped brushless DC motor
Mono-composition of precise hypoid reduction gear

Door Operator for NET-DS



Standard Sliding

DSN-60

-S

Surface mount

-N

Concealed side / flat bar mount

DSN-75

-S

Surface mount

-N

Concealed side / flat bar mount

-F

Concealed flat bar mount

DSN-150

-S

Surface mount

-N

Concealed side / flat bar mount

-F12, -F15

Concealed flat bar mount

DSN-250

Concealed flat bar mount

Telescopic Sliding

**DSN-60, DSN-75,
DSN-150**

DS-D2S

Surface mount

DS-D2

Concealed flat bar mount

Circular Sliding

DSN-75, DSN-150

Eu

Concealed flat bar mount

Wide range of doors

NET-DS door operators are available from less than 60kg to up to 250kg.

-DSN-60 For lighter doors such as stores

-DSN-75 For medium doors such as office buildings

-DSN-150/DSN-250 For heavy doors up to 150kg/250kg such as large buildings

High-power brushless DC motor

High-performance, compact and powerful motor provides smooth and comfortable atmosphere to passers-by.

Thermal protector

Thermal protector prevents a damage to the door operator.

When the excess load is detected, the door operator will have the door slow down. As far as operation continued, passers-by can walk through. After the excess load removed, the door speed will recover automatically.

Door hanger structure

The hanger rail made of stainless steel attached to the aluminum rail base and the durability was enhanced. The quieter operation is also realized by adopting resin coated aluminum rollers in the door hanger.

Door hanger structure



Urethane rubber coated aluminum roller

Hanger rail with stainless steel

Components



DSN-75S Basic Set



Bi-parting accessory

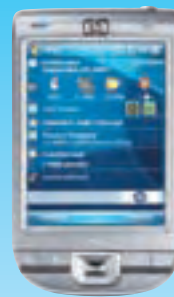
NET-HT, an application for PDA

NET-DS System adopts NET-HT which works as an application for PDA compatible with Windows Mobile 6.

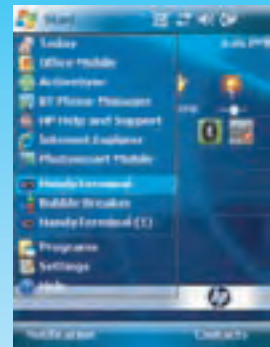
NET-HT, the exclusive application allows PDA to set and adjust sliding door through communication adapter with Bluetooth wireless connectivity. (To be used by NABCO sales distributors)

Functions

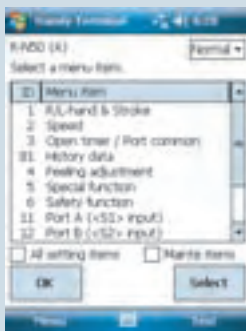
- All settings are selectable and visible with NET-HT.
- All information is transmitted to the application.
- Precise setting and simplified adjustment are available. (fig.1)
- Digital control allows for monitoring the controller status. (fig.2)
- All information is recorded and viewable. (fig.3)



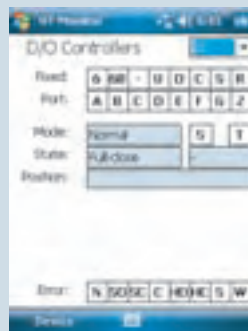
PDA, personal digital assistant
HP iPAQ 112



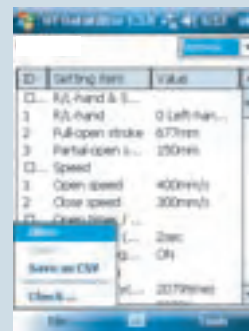
Synchronizing data with a PC
Up-to-date information stored on the PDA



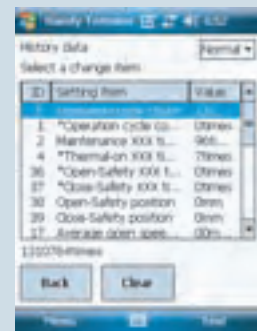
(fig.1) Menu item



(fig.2) Monitoring



(fig.3) Data storage



(fig.3) Maintenance information

Optional devices



APS-N20 Advanced Program Switch

APS-N20 makes sliding doors much more convenient to use. With color LCD, automatic doors can be easily operated in the most suitable way.



APS-N1 Advanced Program Switch

Because of a low-profile device, APS-N1 is available for surface mounting.



SKD-2 Electric Lock

SKD-2 and KD-N controller

SKD-2 is a compact electric deadbolt lock for sliding door. Fail-secure type and Fail-safe type are available. This lock is controlled by KD-N controller with NET-DS System. Easier installation and improved reliability are achieved.



EOS Emergency Operating System

EOS controller and battery unit

EOS operates sliding door at a power failure or in an emergency condition. EOS controller and battery unit are required for the operation of EOS emergency control. If a power failure or EOS controller receives an emergency signal, the system will operate the door either open or close using the power from the battery unit.

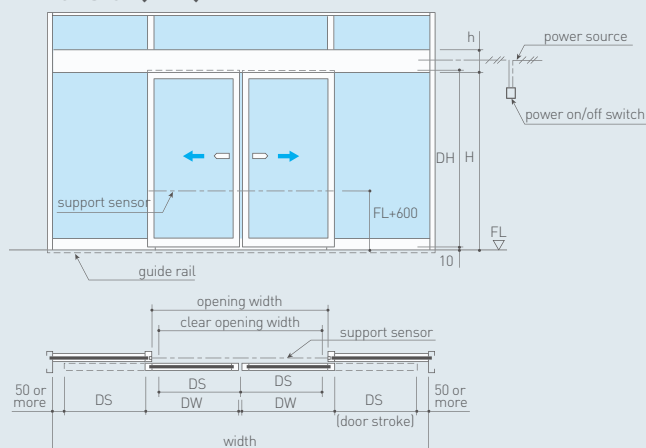
Standard sliding



Door Type	Single					Bi-Parting				
Door Operator Type	DSN-60	DSN-75	DSN-150		DSN-250	DSN-60	DSN-75	DSN-150		DSN-250
Applicable Door Mass x Door Qty (kg)	75 x 1	100 x 1	120 x 1	150 x 1*2	250 x 1	60 x 2	85 x 2	120 x 2	150 x 2 *2	250 x 2
Applicable Door Area : DW×DH (m²)	2.2	2.8	3.3		5	1.8	2.6	3.0		5
Applicable Door Width : DW (mm)	650 ~2500				1200 ~3100	650 ~2500				900 ~2705
Applicable Door Height : DH (mm)	—					—				
Ratio of Door Height / Width : DH / DW	Max. 4.0				Max. 3.0	Max. 4.0				Max. 3.0
Power Supply	100V AC ± 10%, 50 / 60Hz, 5A				100V AC ± 10%, 50 / 60Hz, 10A	100V AC ± 10%, 50 / 60Hz, 5A				100V AC ± 10%, 50 / 60Hz, 10A
Average Door Operation Speed (m/sec)	0.4 or less (Adjustable) *1					0.4 or less (Adjustable) *1				
Maximum Endurance Wind Speed (m/sec)	15					15				

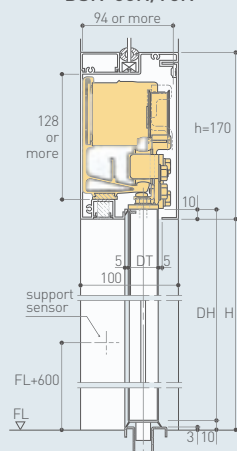
*1 Operation speed between 0 mm and 600 mm *2 Only for DSN-150 F15

Dimension(mm)



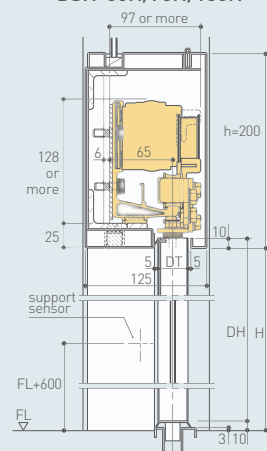
Concealed side mount for Aluminum sash

DSN-60N/75N



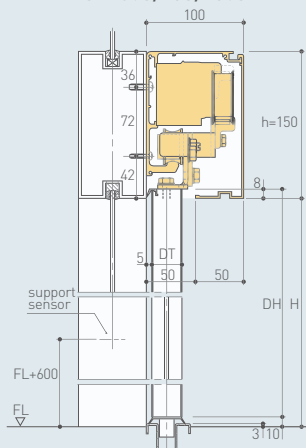
Concealed flat bar mount for Stainless steel sash

DSN-60N/75N/150N



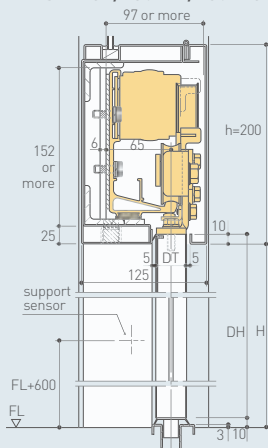
Surface mount

DSN-60S/75S/150S



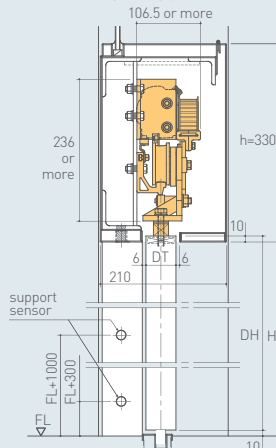
Concealed flat bar mount for Stainless steel sash

DSN-75F/150F12/150F15



Concealed flat bar mount for Stainless steel sash

DSN-250



Telescopic sliding



Single			Bi-Parting		
DSN-60*1	DSN-75	DSN-150	DSN-60*1	DSN-75	DSN-150
50 x 2	65 x 2	100 x 2	40 x 4	55 x 4	100 x 4
1.6	2.1	2.4	1.4	1.9	2.2
500~600*2	500~800*2	500~1000*2	500~550*2	500~650*2	500~1000*2
—					
Max. 4.2					
100VAC ± 10%, 50 / 60Hz, 5A					
0.38 or less (Adjustable)			0.35 or less (Adjustable)		
15					

*1 Indoor use only

*2 When applying to Framed Door

Circular sliding

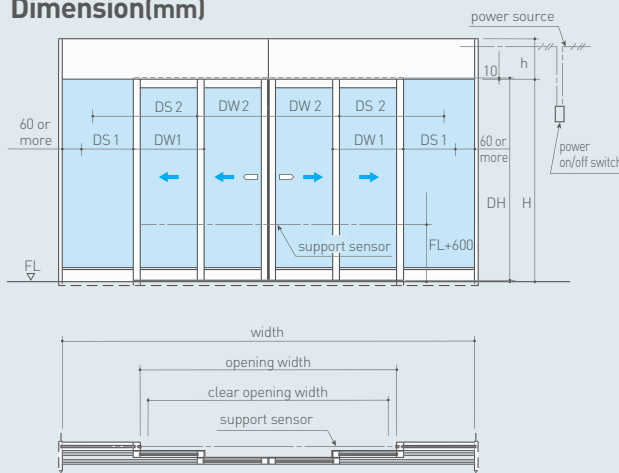


The National Museum of Art, OSAKA

Single		Bi-Parting	
DSN-75	DSN-150	DSN-75	DSN-150
75 x 1	100 x 1	75 x 2	100 x 2
762~1067 *1			
Max. 2438 *1			
Max. 3.0			
100V AC \pm 10%, 50 / 60Hz, 5A			
0.4 or less (Adjustable)			
10			

*1 When applying to Tempered glass Door

Dimension(mm)

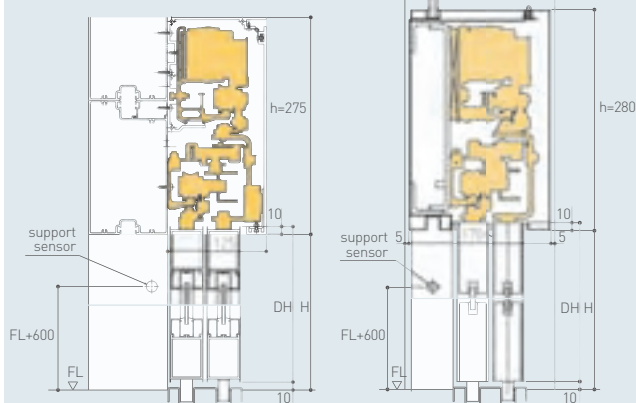


Surface mount

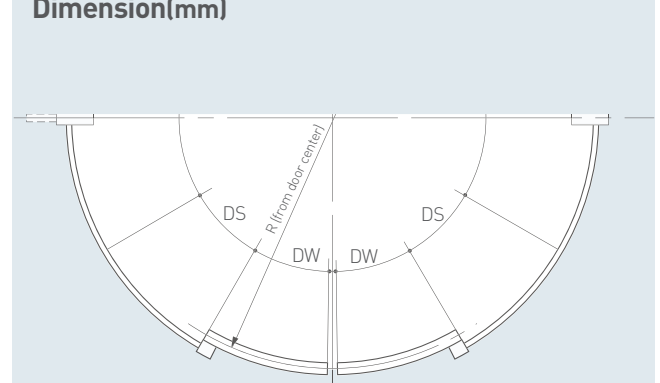
DS-D2S

Concealed flat bar mount

DS-D2

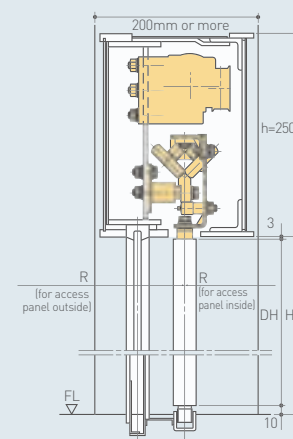


Dimension(mm)



Concealed flat bar mount

EU



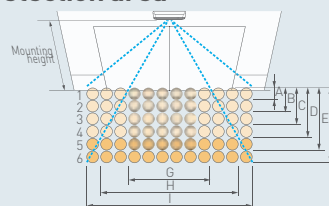
MS-N01 M Search

- Full color LED display, Replacement time display
- Self-diagnosis function, Eco mode
- Anti-snow/insects mode, Anti-vibration mode
- Independent 72 spots, Doorway area monitoring for unique door design, Contact-free touch sensor function, Measure against insertion mode

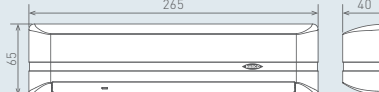


Detection method	Motion / Presence Detection (Near Infrared reflection method)
Mounting height	2.0m~4.0m
Detection area	W 2.9m × D 1.8m (Mounting height 2.2m)
Power supply/ Power consumption	120mA or less at 12VDC
Output rating	NET-DS connector

Detection area



Dimensions (mm)



Detection area size (reference value)

Mounting height(m)	2.0	2.2	2.5	3.0	3.5	4.0
A	100	110	120	150	170	200
B	390	430	480	580	670	770
C	650	720	820	980	1,150	1,310
D	960	1,050	1,200	1,440	1,680	1,920
E	1,300	1,430	1,620	1,950	2,270	2,590
F	1,600	1,820	2,070	2,490	2,920	3,320
G	1,220	1,350	1,530	1,840	2,150	2,450
H	2,100	2,320	2,630	3,160	3,690	4,210
I	2,640	2,900	3,300	3,960	4,620	5,280

※The above values are obtained when the area adjuster is set at zero degree.

Mass : 260g

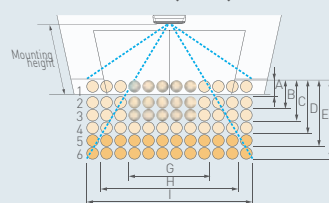
iS-N4000 iSearch

- Independent 72 spots
- Eco mode

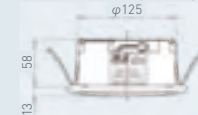


Detection method	Motion / Presence Detection (Near Infrared reflection method)
Mounting height	Max. 4.0m
Detection area	Max. W 2.5m x D 1.31m [Mounting height 2.4m]
Power voltage	12V DC ± 10%
Current consumption	110mA or less
Output rating	NET-DS connector

Detection area (mm)



Dimensions (mm)



Mounting hole : $\phi 128$ -130mm
Ceiling thickness : 2-25mm

Mass : 330g

Detection area size (reference value)

Mounting height (m)	2.0	3.0	4.0
A	95	140	185
B	275	410	545
C	460	690	910
D	660	985	1,310
E	870	1,300	1,730
F	1,090	1,635	2,180
G	860	1,280	1,700
H	1,630	2,430	3,240
I	2,080	3,090	4,120

NP-10/NP-10LB Beam Sensor

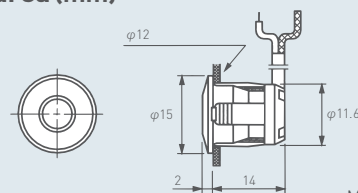
- Simple and reliable



Model	NP-10B	NP-10LB*1
Detection method	Motion / Presence Detection (Near Infrared reflection method)	
Distance between photocells	Max. 5.0m	Max. 8.0m

*1 NP-10LB works with the exclusive controller.

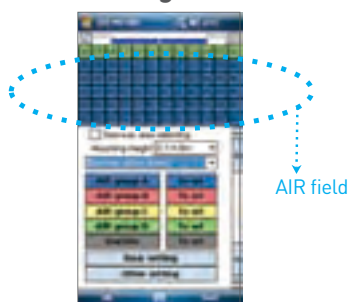
Detection area (mm)



Mass : NP-10B 120g
: NP-10LB 230g

Display on NET-HT

Area setting (MS-N01)



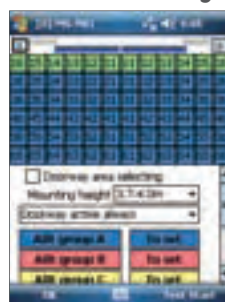
The detection area can be set spot by spot. (=AIR field) Easy and accurate adjustment are available.

Preset selection



Preset for sliding door, circular door and folding door are available.

Real-time monitoring for confirmation of detection area



Standby



During test, Active AIR fields become green and Detected AIR fields become pink.

Nabtesco Corporation

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ISO9001 • ISO14001 Certified



For further details, please contact:

All specifications herein are subject to change without notice

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