

## Commercial Actuator Catalog



## **APPLICATION**

Our products can be used in multiple applications and markets. We offer linear actuators, control boxes, hand pendants, and accessories or complete solution for each application. In this catalog, you can easily find the market that each product is mainly designed for by referring to its icons. Below is the description of the icon for each market.



### **FURNITURE**

This icon indicates products designed for furniture applications with improving ergonomics or comforts such as adjustable home living bed, electric sofa, lifting table/desk and recliner. Our system can be controlled by mobile phone application.



### **HOMECARE**

This icon indicates products designed for homecare applications helping elder or disable people who requires aids to perform their living activities, such as get-up chair, nursing bed, shower bed and shower chair.



### **MEDICAL**

This icon indicates products designed for medical applications such as hospital bed, patient lift/hoist, dental chair, operation table, rehabilitation bed, therapy table, and examination table. Our products are EN60601 certified and can drive up to 12,000N. Manual release with own patent listed is available for emergency use.



## **GATE OPENER**

This icon indicates products designed for gate and window opener. Our products are well designed as a complete kit for end consumers to install easily by themselves. They can be used in automatic swing gate, sliding gate, garage door and swing shutter.



## **INDUSTRIAL AUTOMATION**

This icon indicates products designed for industrial automation such as manufacturing machinery, process control equipment, conveyor system...etc. Both Ball Screw and Acme Screw drive are available.



## **MOBILE OFF HIGHWAY**

This icon indicates products designed for Mobile Off Highway applications and will be used in harsh conditions such as recreational vehicle, agricultural machinery, construction machinery, fork lift and wheelchair lift van.



## **SOLAR TRACKER**

This icon indicates products designed for solar tracking systems. Our products are qualified by strict reliability standard required in solar application and can drive up to 18,000N. They can be applied to solar tracker from residential scale to mega scale power plant.

# Actuator

## ND20F



Input: 24V DC  
 Max. Push Load: 2000N  
 Max. Pull Load: 2000N  
 Max. Speed at No Load: 33.3mm/s  
 Stroke: 50~250mm  
 Duty Cycle: 10%

IP Level: IP42  
 Min. Installation Dimension: 135mm+Stroke  
 Certificate: CE, EMC Directive 2004/108/EC  
 Preset limit switches  
 Option: Hall effect sensor  
 Mechanical brake  
 With special cable to work without control box



Model No.	Max. Push/Pull (N)	Self-locking ability (N)	Speed (mm/s)		Current (A)@ 24V	
			No load	Full load	No load	Full load
ND20F-24-A3-XXX.XXX-CXX-XXX	2000	2000	4.3	3.3	0.3	1.2
ND20F-24-A4-XXX.XXX-CXX-XXX	2000	2000	5.6	4.0	0.3	1.5
ND20F-24-A6-XXX.XXX-CXX-XXX	2000	1500	8.3	5.3	0.3	2.3
ND20F-24-K3-XXX.XXX-CXX-XXX	2000	2000	8.3	4.7	0.4	1.8
ND20F-24-K4-XXX.XXX-CXX-XXX	2000	1000	11.1	5.6	0.4	2.2
ND20F-24-A8-XXX.XXX-CXX-XXX	2000	1000	11.1	6.2	0.3	2.3
ND20F-24-K6-XXX.XXX-CXX-XXX	1500	500	16.6	7.2	0.4	2.35
ND20F-24-K8-XXX.XXX-CXX-XXX	1500	0	22.2	11.5	0.4	2.35
ND20F-24-AC-XXX.XXX-CXX-XXX	1500	500	16.6	8.7	0.3	2.3
ND20F-24-KC-XXX.XXX-CXX-XXX	500	0	33.3	21	0.3	1.55

## ND40F



Input: 24V DC  
 Max. Push Load: 4000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 30.2mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IP42  
 Min. Installation Dimension: 110mm+Stroke  
 Preset limit switches  
 Option: Hall effect sensor  
 Push only  
 PTC thermistor  
 With special cable to work without control box



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V	
			No load	Full load	No load	Full load
ND40F-XXDF3-XXX.XXX-XXXXX0X	2000	2000	5.9	3.9	0.2	1.5
ND40F-XXDF4-XXX.XXX-XXXXX0X	2000	2000	7.7	5.2	0.3	1.6
ND40F-XXDF6-XXX.XXX-XXXXX0X	2000	2000	11.9	6.0	0.2	2.3
ND40F-XXDF8-XXX.XXX-XXXXX0X	2000	2000	15.5	8.4	0.3	2.1
ND40F-XXDH8-XXX.XXX-XXXXX0X	2000	2000	30.2	13.0	0.4	2.5
ND40F-XXEF4-XXX.XXX-XXXXX0X	4000	4000	8.4	4.0	0.2	3.1
ND40F-XXEF6-XXX.XXX-XXXXX0X	3000	3000	11.9	6.3	0.2	3.0
ND40F-XXEF8-XXX.XXX-XXXXX0X	2500	2500	15.9	8.1	0.3	3.1
ND40F-XXEH8-XXX.XXX-XXXXX0X	1500	1500	30.3	14.3	0.4	3.4

## ND60F



Input: 12 / 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 33.3mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IP42  
 Min. Installation Dimension: 160mm+Stroke  
 Certificate: CE, EMC Directive 2014/30/EU  
 Preset limit switches  
 Option: Hall effect sensor  
 Mechanical brake  
 With special cable to work without control box  
 Push only  
 Safety nut



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Self-locking ability (N)	Speed (mm/s)		Current (A)			
				No load	Full load	No load		Full load	
						12V	24V	12V	24V
ND60F-XX-F3-XXX.XXX	6000	4000	6000	4.1	2.8	1.2	0.6	5.2	2.6
ND60F-XX-A4-XXX.XXX	6000	4000	5000	4.2	2.9	0.8	0.6	5.4	2.7
ND60F-XX-F4-XXX.XXX	5000	4000	5000	5.5	4.4	0.8	0.6	5.6	2.8
ND60F-XX-A6-XXX.XXX	4000	4000	2500	6.2	3.8	0.4	0.6	6.0	3.0
ND60F-XX-F6-XXX.XXX	3000	3000	2500	8.2	6.6	1.0	0.6	5.6	2.8
ND60F-XX-A8-XXX.XXX	3000	3000	2000	8.3	5.0	0.6	0.6	5.4	2.7
ND60F-XX-F8-XXX.XXX	3000	3000	2000	11.0	8.2	1.0	0.6	5.8	2.9
ND60F-XX-AG-XXX.XXX	1500	1500	700	16.6	12.2	0.4	0.6	5.6	2.8
ND60F-XX-KG-XXX.XXX	750	750	0	33.3	23.5	0.4	0.6	5.2	2.7

## ND61F



Input: 12 / 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 33.3mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IP42  
 Min. Installation Dimension: 150mm+Stroke  
 Certificate: CE, EMC Directive 2014/30/EU  
 Preset limit switches  
 Option: Hall effect sensor  
 Mechanical brake  
 With special cable to work without control box  
 Push only



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Self-locking ability (N)	Speed (mm/s)		Current (A)			
				No load	Full load	No load		Full load	
						12V	24V	12V	24V
ND61F-XX-A4-XXX.XXX	6000	4000	5000	4.2	2.9	0.8	0.4	5.4	2.7
ND61F-XX-A6-XXX.XXX	4000	4000	2500	6.2	3.8	0.4	0.4	6.0	3.0
ND61F-XX-A8-XXX.XXX	3000	3000	2000	8.3	5.0	0.6	0.4	5.4	2.7
ND61F-XX-AG-XXX.XXX	1500	1500	700	16.6	12.3	0.4	0.4	5.6	2.8
ND61F-XX-KG-XXX.XXX	750	750	0	33.3	23.5	0.4	0.4	5.2	2.7

# Actuator

## ND70G



Input: 24V DC  
 Max. Push Load: 7000N  
 Max. Pull Load: 5000N  
 Max. Speed at No Load: 7.7mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IP43  
 Min. Installation Dimension: 150mm+Stroke  
 Preset limit switches  
 Option: Hall effect sensor  
 Push only



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V	
			No load	Full load	No load	Full load
ND70G-24-A4-XXX-XXX-CXX-XXX	7000	5000	3.9	2.9	0.3	2.8
ND70G-24-A6-XXX-XXX-CXX-XXX	5000	4000	5.8	4.2	0.3	2.8
ND70G-24-A8-XXX-XXX-CXX-XXX	4000	3500	7.7	5.7	0.3	3.2

## ND10P



Input: 24V DC  
 Max. Push Load: 1000N  
 Max. Pull Load: 1000N  
 Max. Speed at No Load: 18.0mm/s  
 Stroke: 35~50mm  
 Duty Cycle: 10%

Min. Installation Dimension: 145mm+Stroke  
 Preset limit switches  
 Option: Hall effect sensor



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)@ 24VDC	
		No load	Full load	No load	Full load
NP10D-24-F4-XXX-XXX-XXX	1000	6.4	2.6	0.6	2.1
NP10D-24-F8-XXX-XXX-XXX	500	16.2	5.3	0.6	2

## ND20B



**Input:** 24V DC  
**Max. Push Load:** 1500N  
**Max. Pull Load:** 1000N  
**Max. Speed at No Load:** 48.0mm/s  
**Stroke:** 40~295mm  
**Duty Cycle:** 10%

**Retracted Length:** 178mm  
**Certificate:** CE, EMC Directive 2014/30/EU  
**Preset limit switches**  
**With special cable to work without control box**  
**Option:** Cable outlet from front or rear end



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V	
			No load	Full load	No load	Full load
ND20B-24-N4-XXX.XXX	1500	1000	25	23	0.6	2.3

## ND21B



**Input:** 24V DC  
**Max. Push Load:** 1500N  
**Max. Pull Load:** 1500N  
**Max. Speed at No Load:** 55.0mm/s  
**Stroke:** 333mm  
**Duty Cycle:** 10%

**Retracted Length:** 130mm  
**Certificate:** CE, EMC Directive 2014/30/EU, UL  
**Preset limit switches**  
**With special cable to work without control box**



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)	
		No load	Full load	No load	Full load
ND21B	1500	52	42	0.5	2.5

# Actuator

## ND23B



Input: 24V DC  
 Max. Push Load: 1500N  
 Max. Pull Load: 1000N  
 Max. Speed at No Load: 25mm/s  
 Stroke: 40~230mm  
 Duty Cycle: 10%

Retracted Length: 133mm  
 Certificate: CE, EMC Directive 2014/30/EU  
 Preset limit switches  
 With special cable to work without control box  
 Option: Cable outlet from front or rear end



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)	
			No load	Full load	No load	Full load
ND23B-XX-N4-XXX.XXX-XX-XX	1500	1000	25	23	0.6	2.3

## ND60B



Input: 12 / 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 33.3mm/s  
 Stroke: 100~1000mm  
 Duty Cycle: 10%

IP Level: IP42  
 Retracted Length: 135mm  
 Certificate: CE, EMC Directive 2014/30/EU  
 Adjustable limit switches  
 Option: Hall effect sensor  
 With special cable to work without control box



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Self-locking ability (N)	Speed (mm/s)		Current (A)			
				No load	Full load	No load		Full load	
						12V	24V	12V	24V
ND60B-XX-F3-XXX.XXX ...	6000	4000	6000	4.1	2.8	1.2	0.6	5.2	2.6
ND60B-XX-A4-XXX.XXX ...	6000	4000	5000	4.2	2.9	0.8	0.6	5.4	2.7
ND60B-XX-F4-XXX.XXX ...	5000	4000	5000	5.5	4.4	0.8	0.6	5.6	2.8
ND60B-XX-A6-XXX.XXX ...	4000	4000	2500	6.2	3.8	0.4	0.6	6.0	3.0
ND60B-XX-F6-XXX.XXX ...	3000	3000	2500	8.2	6.6	1.0	0.6	5.6	2.8
ND60B-XX-A8-XXX.XXX ...	3000	3000	2000	8.3	5.0	0.6	0.6	5.4	2.7
ND60B-XX-F8-XXX.XXX ...	3000	3000	2000	11.0	8.2	1.0	0.6	5.8	2.9
ND60B-XX-AG-XXX.XXX ...	1500	1500	700	16.6	12.2	0.4	0.6	5.6	2.8
ND60B-XX-KG-XXX.XXX...	750	750	0	33.3	23.5	0.4	0.6	5.2	2.7



## ND61B



Input: 12 / 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 33.3mm/s  
 Stroke: 100~1000mm  
 Duty Cycle: 10%

IP Level: IP20  
 Retracted Length: 127mm  
 Certificate: CE, EMC Directive 2014/30/EU  
 Adjustable limit switches  
 Option: Hall effect sensor  
 Mechanical brake  
 With special cable to work without control box



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Self-locking ability (N)	Speed (mm/s)		Current (A)			
				No load	Full load	No load		Full load	
						12V	24V	12V	24V
ND61B-XX-F3-XXX.XXX ...	6000	4000	6000	4.1	2.8	1.2	0.6	5.2	2.6
ND61B-XX-A4-XXX.XXX ...	6000	4000	5000	4.2	2.9	1.2	0.6	5.4	2.7
ND61B-XX-F4-XXX.XXX ...	5000	4000	5000	5.5	4.4	1.2	0.6	5.6	2.8
ND61B-XX-A6-XXX.XXX ...	4000	4000	2500	6.2	3.8	1.2	0.6	6.0	3.0
ND61B-XX-F6-XXX.XXX ...	3000	3000	2500	8.2	6.6	1.2	0.6	5.6	2.8
ND61B-XX-A8-XXX.XXX ...	3000	3000	2000	8.3	5.0	1.2	0.6	5.4	2.7
ND61B-XX-F8-XXX.XXX ...	3000	3000	2000	11.0	8.2	1.2	0.6	5.8	2.9
ND61B-XX-AG-XXX.XXX...	1500	1500	700	16.6	12.2	1.2	0.6	5.6	2.8
ND61B-XX-KG-XXX.XXX...	750	750	0	33.3	23.5	1.2	0.6	5.2	2.7

## NDN60B



Input: 12 / 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 33.3mm/s  
 Stroke: 100~1000mm  
 Duty Cycle: 10%

Retracted Length: 110mm  
 Certificate: EN61000-6, EN61000-4, IEC61000-4  
 Adjustable limit switches  
 Without outer tube  
 Option: Hall effect sensor  
 Mechanical brake  
 With special cable to work without control box



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Self-locking ability (N)	Speed (mm/s)		Current (A)			
				No load	Full load	No load		Full load	
						12V	24V	12V	24V
NDN60B-XX-F3-XXX.XXX ...	6000	4000	6000	4.1	2.8	1.2	0.6	5.2	2.6
NDN60B-XX-A4-XXX.XXX ...	6000	4000	5000	4.2	2.9	1.2	0.6	5.4	2.7
NDN60B-XX-F4-XXX.XXX ...	5000	4000	5000	5.5	4.4	1.2	0.6	5.6	2.8
NDN60B-XX-A6-XXX.XXX ...	4000	4000	2500	6.2	3.8	1.2	0.6	6.0	3.0
NDN60B-XX-F6-XXX.XXX ...	3000	3000	2500	8.2	6.6	1.2	0.6	5.6	2.8
NDN60B-XX-A8-XXX.XXX ...	3000	3000	2000	8.3	5.0	1.2	0.6	5.4	2.7
NDN60B-XX-F8-XXX.XXX ...	3000	3000	2000	11.0	8.2	1.2	0.6	5.8	2.9
NDN60B-XX-AG-XXX.XXX...	1500	1500	700	16.6	12.2	1.2	0.6	5.6	2.8
NDN60B-XX-KG-XXX.XXX...	750	750	0	33.3	23.5	1.2	0.6	5.2	2.7

# Actuator

## ND10L



Input: 12 / 24V DC  
 Max. Push Load: 1000N  
 Max. Pull Load: 1000N  
 Max. Speed at No Load: 18.0mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IPX4  
 Min. Installation Dimension: 256mm+Stroke  
 Preset limit switches



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)			
			No load	Full load	No load		Full load	
					12V	24V	12V	24V
ND10L-XX-A4-16-XXX.XXX-CXX	1000	1000	8	6	4.2	3.1	5.4	3.8
ND10L-XX-A6-16-XXX.XXX-CXX	1000	1000	9	6.5	4.3	3.1	5.3	3.7
ND10L-XX-A8-16-XXX.XXX-CXX	800	800	13	7.5	4.2	3.1	5.2	3.6
ND10L-XX-AC-16-XXX.XXX-CXX	500	500	18	12	4.3	3.1	4.9	3.4

## ND12L



Input: 24V DC  
 Max. Push Load: 1500N  
 Max. Pull Load: 1500N  
 Max. Speed at No Load: 17.4mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IP66 / IP69K  
 Min. Installation Dimension: 187mm+Stroke  
 Dual hall effect sensor  
 Made of stainless steel SUS304



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)	
			No load	Full load	No load	Full load
					0.3	2.0
ND12L-2419-XXXX.XXX	600	600	17.4	11.7	0.3	2.0
ND12L-2427-XXXX.XXX	1000	1000	12.3	8.0	0.3	2.0
ND12L-2443-XXXX.XXX	1500	1500	7.5	5.0	0.3	2.0

## ND2L



Input: 24V DC  
 Max. Push Load: 800N  
 Max. Pull Load: 800N  
 Max. Speed at No Load: 18.0mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IP43 / IP54  
 Min. Installation Dimension: 109mm+Stroke  
 Certificate: CE, EMC Directive 2004/108/EC  
 Operating Temperature: -25~+65  
 Preset limit switches  
 Option: Clamp  
 Mounting bracket



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)	
		No load	Full load	No load 24V	Full load 24V
ND2L -XX-30-E6-XXX-CXX-XXXX	800	9.3	6.5	0.13	0.8
ND2L -XX-30-K3-XXX-CXX-XXXX	800	9.2	8.0	0.27	1.2
ND2L -XX-30-K6-XXX-CXX-XXXX	800	18.0	14.1	0.4	1.6

## ND3L



Input: 12 / 24V DC  
 Max. Push Load: 1000N  
 Max. Pull Load: 1000N  
 Max. Speed at No Load: 44.0mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 25%

IP Level: IP54 / IP65  
 Min. Installation Dimension: 108mm+Stroke  
 Certificate: CE, EMC Directive 2004/108/EC  
 Operating Temperature: -25~+65  
 Preset limit switches  
 Option: Hall effect sensor / potentiometer  
 Clamp  
 Mounting bracket  
 Quiet version (LD3Q)



WITH HALL EFFECT SENSOR



WITH POTENTIOMETER

Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
ND3L -XX-05-(E6/K3)-XXX	150	43.9	40.0	0.8	0.4	2.0	1.0
ND3L -XX-10-(E6/K3)-XXX	250	27.6	26.0	0.8	0.4	2.4	1.2
ND3L -XX-20-(E6/K3)-XXX	500	14.6	13.5	0.8	0.4	2.6	1.3
ND3L -XX-30-(E6/K3)-XXX	800	9.5	9.1	0.8	0.4	2.9	1.5
ND3L -XX-40-(E6/K3)-XXX	1000	7.0	6.5	0.8	0.4	2.8	1.4
ND3LQ -XX-20-D3-XXX	500	5.8	3.9	0.2	0.1	1.0	0.5
ND3LQ -XX-30-D3-XXX	800	3.8	2.6	0.2	0.1	1.2	0.6

# Actuator

## ND20L



Input: 12 / 24V DC  
 Max. Push Load: 2500N  
 Max. Pull Load: 2500N  
 Max. Speed at No Load: 27.0mm/s  
 Stroke: 100~300mm  
 Duty Cycle: 25%

IP Level: IP65  
 Min. Installation Dimension: 105mm+Stroke  
 Certificate: CE, EMC Directive 2014/30/EU  
 Operating Temperature: -25~+65  
 Preset limit switches  
 Option: Hall effect sensor / potentiometer  
 Mounting bracket



Model No.	Gear Ratio	Max. Push / Pull Load (N)	Speed (mm/s)				Current (A)			
			No load		Full load		No load		Full load	
			12V	24V	12V	24V	12V	24V	12V	24V
ND20L-XX-10-G4-X	10:1	500	26.8	27.0	18.6	18.7	1.3	0.6	4.4	2.4
ND20L-XX-20-G4-X	20:1	1000	14.7	15.1	10.4	10.7	1.1	0.5	4.6	2.3
ND20L-XX-30-G4-X	30:1	1500	9.9	10.3	6.8	7.2	1.0	0.6	4.3	2.3
ND20L-XX-40-G4-X	40:1	2000	7.4	7.6	5.1	5.7	1.0	0.6	4.5	2.0
ND20L-XX-50-G4-X	50:1	2500	6.2	6.1	4.4	4.4	0.9	0.5	4.1	2.2

## ND36L



Input: 12 / 24V DC  
 Max. Push Load: 1200N  
 Max. Pull Load: 1200N  
 Max. Speed at No Load: 44.0mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 20%

IP Level: IP66 / IP69K  
 Min. Installation Dimension: 108mm+Stroke  
 Operating Temperature: -10~+40  
 Preset limit switches  
 Option: Mounting bracket



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)					
		No load		Full load		No load		Full load	
		12V	24V	12V	24V	12V	24V	12V	24V
ND36L-XX-05-XXX.XXX-XX0X	150	43.9	36.5	1.3	0.6	2.7	1.6		
ND36L-XX-10-XXX.XXX-XX0X	250	27.6	23.5	1.3	0.6	2.7	1.6		
ND36L-XX-20-XXX.XXX-XX0X	500	14.6	12.5	1.3	0.6	3.1	1.6		
ND36L-XX-30-XXX.XXX-XX0X	800	9.5	7.5	1.3	0.6	3.3	1.6		
ND36L-XX-40-XXX.XXX-XX0X	1000	7.0	5.5	1.3	0.6	3.3	1.4		



# Actuator

## ND21M



Input: 24V DC  
Max. Push Load: 2000N  
Max. Pull Load: 2000N  
Max. Speed at No Load: 18.8mm/s  
Stroke: 100~400mm  
Duty Cycle: 10%

IP Level: IPX5  
Min. Installation Dimension: 135mm+Stroke  
Certificate: CE, EMC Directive 93/42/EEC and 2014/30/EU  
Preset limit switches  
Option: Hall effect sensor



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A) @ 24VDC	
		No load	Full load	No load	Full load
ND21M-24H3-XXX-XXX-XXX00XX	2000	4.5	2.3	0.3	1.4
ND21M-24W3-XXX-XXX-XXX00XX	2000	7.1	5.1	0.2	1.9
ND21M-24W6-XXX-XXX-XXX00XX	1500	14.0	9.3	0.3	2.3
ND21M-24W8-XXX-XXX-XXX00XX	1500	18.8	11.9	0.2	2.5

## ND30M



Input: 24V DC  
Max. Push Load: 3000N  
Max. Pull Load: 3000N  
Max. Speed at No Load: 8.9mm/s  
Duty Cycle: 10%



## ND50M



**Input:** 24V DC  
**Max. Push Load:** 3500N  
**Max. Pull Load:** 2000N  
**Max. Speed at No Load:** 11.4mm/s  
**Stroke:** 50~600mm  
**Duty Cycle:** 10%

**Min. Installation Dimension:** 137mm+Stroke  
**Certificate:** CE, Medical Device Directive (MDD) 93/42/EEC  
**Preset limit switches**  
**Option:** Push only



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
			No load	Full load	No load	Full load
ND50M-24-A3-XXX-XXX-CXX-XXXX	3500	2000	5.0	3.8	0.8	3.8
ND50M-24-F3-XXX-XXX-CXX-XXXX	2000	2000	11.4	9.0	0.9	3.5

## ND51M



**Input:** 24V DC  
**Max. Push Load:** 3500N  
**Max. Pull Load:** 2000N  
**Max. Speed at No Load:** 11.4mm/s  
**Stroke:** 100~600mm  
**Duty Cycle:** 10%

**IP Level:** IP66  
**Min. Installation Dimension:** 141mm+Stroke  
**Certificate:** CE, Medical Device Directive (MDD) 93/42/EEC  
**Preset limit switches**  
**Option:** Push only



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
			No load	Full load	No load	Full load
ND51M-24-A3-XXX-XXX-CXX-XXXX	3500	2000	5.0	3.8	0.8	3.8
ND51M-24-F3-XXX-XXX-CXX-XXXX	2000	2000	11.4	9.0	0.9	3.5

# Actuator

## ND52M



Input: 24V DC  
 Max. Push Load: 1000N  
 Max. Pull Load: 1000N  
 Max. Speed at No Load: 25.0mm/s  
 Stroke: 100~300mm  
 Duty Cycle: 10%

IP Level: IP66 / IP69K  
 Min. Installation Dimension: 156mm+Stroke  
 Certificate: CE, EMC Directive 2014/30/EU and 2004/108/EC  
 Stainless steel front connector and extension tube  
 Option: Bellow protection (stroke 100mm)  
 Metal worm wheel



BELLOW PROTECTION

Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
			No load	Full load	No load	Full load
ND52M-24-M6-XXX.XXX-X-X	1000	1000	25.0	18.5	1.5	5.0

## ND53M



Input: 24 / 36V DC  
 Max. Push Load: 3500N  
 Max. Pull Load: 2000N  
 Max. Speed at No Load: 10.5mm/s  
 Stroke: 100~300mm  
 Duty Cycle: 10%

Min. Installation Dimension: 167mm+Stroke  
 Preset limit switches



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)	
			No load	Full load	No load	Full load
ND53M-24-XXX.XXX-CXX	3500	2000	10.5	8.5	1	4.5
ND53M-36-XXX.XXX-CXX	3500	2000	10.5	8.5	0.8	3.5



## ND56M



Input: 24V DC  
 Max. Push Load: 5000N  
 Max. Pull Load: 3500N  
 Max. Speed at No Load: 43.0mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IPX1 / IPX6  
 Min. Installation Dimension: 156mm+Stroke  
 Certificate: CE, EMC Directive 93/42/EEC  
 Motor orientation can be adjusted in every 30°  
 Preset cam type limit switches  
 Option: Hall effect sensor / reed sensor / potentiometer  
 Waterproof case



WATERPROOF CASE

Model No.	Max. Push Load (N)	Max. Pull Load (N)	Typical Speed (mm/s)		Typical Current (A)@ 24V	
			No load	Full load	No load	Full load
ND56M-X-24R3-XXX.XXX-XXXX0XX	5000	3500	5	4	1.0	4.0
ND56M-X-24W6-XXX.XXX-XXXX0XX	2000	2000	18	15	1.1	4.6
ND56M-X-24N9-XXX.XXX-XXXX0XX	1000	1000	43	30	1.5	5.0

## ND57M



Input: 12 / 24V DC  
 Max. Push Load: 4000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 12.6mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IP21 / IPX6  
 Min. Installation Dimension: 143mm+Stroke  
 Certificate: Certificate: CE, EMC Directive 93/42/EEC  
 Motor orientation can be adjusted in whole 360°  
 Option: Hall effect sensor / potentiometer  
 Preset cam type limit switches  
 Waterproof case  
 12V high power motor



WATERPROOF CASE



12V HIGH POWER MOTOR



WITH LIMIT SWITCH OR POSITIONING FEEDBACK

Model No.	Input Voltage (V DC)	Max. Push/Pull Load (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
ND57M-X-24K3-XXX.XXX-XXXXXXX	24	4000	4.8	3.5	0.7	3.5
ND57M-X-24K4-XXX.XXX-XXXXXXX	24	3200	6.4	4.8	0.7	3.4
ND57M-X-24K6-XXX.XXX-XXXXXXX	24	2700	9.4	7.0	0.7	3.8
ND57M-X-24K8-XXX.XXX-XXXXXXX	24	2300	12.6	8.9	0.8	4.0
ND57M-X-12W4-XXX.XXX-XXXXXXX	12	4000	12.0	9.5	3.0	16.0

# Actuator

## ND60M



Input: 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 23.0mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IPX4 / IPX6  
 Min. Installation Dimension: 154mm+Stroke  
 Certificate: CE, EMC Directive 93/42/EEC  
 Preset limit switches  
 Aluminum outer tube  
 Steel extension tube  
 Option: Hall effect sensor  
 Push only  
 Safety nut  
 QR1 or QR2 quick release  
 MR1 manual release



QR1  
QUICK RELEASE

QR2  
QUICK RELEASE

Model No.	Max. Push Load (N)	Max. Pull Load (N)	Typical Speed (mm/s)		Current (A)@ 24V	
			No load	Full load	No load	Full load
ND60M-24-A3-XXX-XXX-CXX	6000	4000	2.9	2.1	0.5	3.0
ND60M-24-A4-XXX-XXX-CXX	6000	4000	3.8	2.5	0.5	3.5
ND60M-24-A6-XXX-XXX-CXX	6000	4000	5.8	3.6	0.5	4.0
ND60M-24-A8-XXX-XXX-CXX	6000	4000	7.6	5.0	0.5	4.5
ND60M-24-AC-XXX-XXX-CXX	3000	3000	11.5	8.2	0.5	3.5
ND60M-24-AG-XXX-XXX-CXX	1500	1500	15.3	12.0	0.5	3.0
ND60M-24-K3-XXX-XXX-CXX	6000	4000	5.8	3.8	0.5	3.5
ND60M-24-K4-XXX-XXX-CXX	6000	4000	7.5	4.5	0.5	4.5
ND60M-24-K6-XXX-XXX-CXX	3000	3000	11.5	6.9	0.5	3.5
ND60M-24-K8-XXX-XXX-CXX	3000	3000	15.3	10.0	0.5	4.0
ND60M-24-KC-XXX-XXX-CXX	2000	2000	23.0	14.7	0.5	4.0

## ND66M



Input: 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 16.6mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IPX5  
 Min. Installation Dimension: 160mm+Stroke  
 Certificate: IEC60601-1, EN60601-1  
 Preset limit switches  
 Option: Hall effect sensor  
 Push only  
 Safety nut



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V	
			No load	Full load	No load	Full load
ND66M-XX-F3-XXX-XXX	6000	4000	4.1	2.8	0.6	2.6
ND66M-XX-A4-XXX-XXX	6000	4000	4.2	2.9	0.4	2.7
ND66M-XX-F4-XXX-XXX	5000	4000	5.5	4.4	0.4	2.8
ND66M-XX-A6-XXX-XXX	4000	4000	6.2	3.8	0.2	3.0
ND66M-XX-F6-XXX-XXX	3000	3000	8.2	6.6	0.5	2.8
ND66M-XX-A8-XXX-XXX	3000	3000	8.3	5.0	0.3	2.7
ND66M-XX-F8-XXX-XXX	3000	3000	11.0	8.2	0.5	2.9
ND66M-XX-AG-XXX-XXX	1500	1500	16.6	12.2	0.2	2.8

## ND7M



Input: 12 / 24V DC  
 Max. Push Load: 6000N  
 Max. Pull Load: 4000N  
 Max. Speed at No Load: 16.6mm/s  
 Stroke: 50~300mm  
 Duty Cycle: 10%

IP Level: IP54  
 Min. Installation Dimension: 160mm+Stroke  
 Certificate: EN60601-1  
 Preset limit switches  
 Option: Hall effect sensor  
         Push only  
         Safety nut  
         QR2 quick release



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)			
			No load	Full load	No load		Full load	
					12V	24V	12V	24V
ND7M -XX-F3-XXX.XXX	6000	4000	4.1	2.8	1.2	0.6	5.2	2.6
ND7M -XX-A4-XXX.XXX	6000	4000	4.2	2.9	0.8	0.4	5.4	2.7
ND7M -XX-F4-XXX.XXX	5000	4000	5.5	4.4	0.8	0.4	5.6	2.8
ND7M -XX-A6-XXX.XXX	4000	4000	6.2	3.8	0.4	0.2	6.0	3.0
ND7M -XX-F6-XXX.XXX	3000	3000	8.2	6.6	1.0	0.5	5.6	2.8
ND7M -XX-A8-XXX.XXX	3000	3000	8.3	5.0	0.6	0.3	5.4	2.7
ND7M -XX-F8-XXX.XXX	3000	3000	11.0	8.2	1.0	0.5	5.8	2.9
ND7M -XX-AG-XXX.XXX	1500	1500	16.6	12.2	0.4	0.2	5.6	2.8

## ND80M



Input: 24V DC  
 Max. Push Load: 8000N  
 Max. Pull Load: 6000N  
 Max. Speed at No Load: 16.6mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IPX4 / IPX5  
 Min. Installation Dimension: 180mm+Stroke  
 Certificate: CE, EMC Directive 93/42/EEC  
 Preset limit switches  
 Steel extension tube  
 Option: Push only  
         Safety Nut  
         QR2 Quick Release  
         MR1 Manual Release



MR1  
MANUAL RELEASE



QR2  
QUICK RELEASE

Model No.	Max. Push Load (N)	Max. Pull Load (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
ND80M-24-A4-XX-XXX.XXX-CXX	8000	6000	4.2	3.3	0.6	5.0
ND80M-24-A6-XX-XXX.XXX-CXX	8000	6000	6.2	4.6	0.6	6.0
ND80M-24-A8-XX-XXX.XXX-CXX	8000	6000	8.1	5.9	0.6	6.7
ND80M-24-K8-XX-XXX.XXX-CXX	3000	3000	16.6	11.8	1.0	5.0

# Actuator

## ND82M



Input: 24V DC  
 Max. Push Load: 8000N  
 Max. Pull Load: 6000N  
 Max. Speed at No Load: 16.6mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IPX4 / IPX6  
 Min. Installation Dimension: 177mm+Stroke  
 Certificate: EMC Directive 93/42/EEC  
 Preset limit switches  
 Steel extension tube  
 Option: Push only  
     Safety nut  
     QR2 quick release  
     MR1 manual release



QR2 QUICK RELEASE      MR1 MANUAL RELEASE

Model No.	Max. Push Load (N)	Max. Pull Load (N)	Typical Speed (mm/s)		Typical Current (A)@ 24V	
			No load	Full load	No load	Full load
ND82M-24A4-XXX.XXX-XXXXXXXX	8000	6000	4.2	3.3	0.6	5.0
ND82M-24A6-XXX.XXX-XXXXXXXX	8000	6000	6.2	4.6	0.6	6.0
ND82M-24A8-XXX.XXX-XXXXXXXX	8000	6000	8.1	5.9	0.6	6.7
ND82M-24K8-XXX.XXX-XXXXXXXX	3000	3000	16.6	11.8	1.0	5.0

## ND8M



Input: 110 / 230V AC  
 Max. Push Load: 8000N  
 Max. Pull Load: 6000N  
 Max. Speed at No Load: 16.6mm/s  
 Stroke: 50~400mm  
 Duty Cycle: 10%

IP Level: IPX4 / IPX5  
 Min. Installation Dimension: 210mm+Stroke  
 Certificate: CE, EMC Directive 93/42/EEC  
 Integrate with control unit and power supply  
 Preset limit switches  
 Steel extension tube  
 Option: Push only  
     Safety nut  
     Connect additional 1-2 actuator



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
			No load	Full load	No load	Full load
ND8M-XXA4-XXX.XXX-XXX0XXX	8000	6000	4.2	3.3	0.6	5.0
ND8M-XXA6-XXX.XXX-XXX0XXX	8000	6000	6.2	4.6	0.6	6.0
ND8M-XXA8-XXX.XXX-XXX0XXX	8000	6000	8.1	5.9	0.6	6.7
ND8M-XXK8-XXX.XXX-XXX0XXX	3000	3000	16.6	11.8	1.0	5.0

## ND100M



Input: 24V DC  
 Max. Push Load: 10000N  
 Max. Pull Load: 6000N  
 Max. Speed at No Load: 9.0mm/s  
 Stroke: 100~600mm  
 Duty Cycle: 10%

IP Level: IPX4 / IPX6  
 Min. Installation Dimension: 210mm+Stroke  
 Certificate: CE, EMC Directive 93/42/EEC  
 Preset limit switches  
 Stainless steel extension tube  
 Aluminum outer tube  
 Option: Push only  
     Safety nut  
     QR2 quick release  
     MR2 manual release



QR2 QUICK RELEASE      MR2 MANUAL RELEASE

Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
			No load	Full load	No load	Full load
ND100M-24DC-XXX-XXX-XXXXXXXX	10000	6000	7.0	5.2	1.0	7.0
ND100M-24FC-XXX-XXX-XXXXXXXX	10000	6000	9.0	6.7	1.0	8.2

## ND120M



Input: 24V DC  
 Max. Push Load: 12000N  
 Max. Pull Load: 6000N  
 Max. Speed at No Load: 6.9mm/s  
 Stroke: 100~400mm  
 Duty Cycle: 10%

IP Level: IPX4 / IPX6  
 Min. Installation Dimension: 230mm+Stroke  
 Certificate: CE, EMC Directive 93/42/EEC  
 Preset limit switches  
 Aluminum outer tube  
 Option: Safety nut  
     Mechanical push only extension tube  
     Electrical push only function  
     Hall effect sensor  
     MR3 manual release



MR3 MANUAL RELEASE

Model No.	Max. Push Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
		No load	Full load	No load	Full load
ND120M-24E8-XXX-XXX-XXXXXXXX	12000	6.3	4.4	0.6	6.6
ND120M-24F8-XXX-XXX-XXXXXXXX	12000	6.9	5.2	0.9	7.5

# Actuator

## ND10I



Input: 12 / 24V DC  
 Max. Rated Load: 3500N (ACME)  
 7000N (Ball Screw)  
 Max. Static Load: 4500N (ACME)  
 13600N (Ball Screw)  
 Max. Speed at No Load: 67.1mm/s  
 Stroke: 102~610mm  
 Duty Cycle: 25%

IP Level: IP54 / IP65  
 Min. Installation Dimension: 160mm+Stroke  
 Operating Temperature: -25~+65  
 Certificate: CE, EMC Directive 2014/30/EU  
 ACME type or ball screw type  
 Overload protection by clutch  
 Iron (ACME) or stainless steel (ball screw) extension tube  
 Option: Potentiometer  
 Adjustable limit switches  
 Manual drive connector



WITH POTENTIOMETER

Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
ND10I-XX-10-A-XXX	1500	33.5	26.7	3.4	2.2	17.6	8.8
ND10I-XX-20-A-XXX	2500	16.8	14.3	3.4	2.2	13.2	6.6
ND10I-XX-40-A-XXX	3500	8.4	7.4	3.4	2.2	11.0	5.5
ND10I-XX-05-B-XXX	2500	67.1	47.2	3.4	2.2	26.4	13.2
ND10I-XX-10-B-XXX	3500	33.5	26.7	3.4	2.2	17.6	8.8
ND10I-XX-20-B-XXX	4500	16.8	14.3	3.4	2.2	13.2	6.6
ND10I-XX-30-B-XXX	6000	11.2	9.8	3.4	2.2	12.1	6.1
ND10I-XX-40-B-XXX	7000	8.4	7.4	3.4	2.2	11.0	5.5

## ND10IBT



Input: 24V DC  
 Max. Rated Load: 1000N  
 Max. Static Load: 1500N  
 Max. Speed at No Load: 72.0mm/s  
 Stroke: 102~457mm  
 Duty Cycle: 25%

IP Level: IP54 / IP65  
 Min. Installation Dimension: 160mm+Stroke  
 Operating Temperature: -25~+65  
 ACME type spindle



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A) @ 24V DC	
		No load	Full load	No load	Full load
ND10IBT-24F5AXXX-0X000XX	1000	72	53	1.8	10

# Actuator

## ND11I



Input: 12 / 24V DC  
 Max. Rated Load: 3500N (ACME)  
 7000N (Ball Screw)  
 Max. Static Load: 4500N (ACME)  
 13600N (Ball Screw)  
 Max. Speed at No Load: 33.5mm/s  
 Stroke: 102~610mm  
 Duty Cycle: 25%

IP Level: IP54 / IP65  
 Min. Installation Dimension: 217mm+Stroke  
 Operating Temperature: -25~+65  
 Certificate: CE, EMC Directive 2014/30/EU  
 ACME type or ball screw type  
 Adjustable limit switches  
 Option: Side cable outlet



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
ND11I-XX-10-A-XXX	1500	33.5	26.7	3.4	2.2	17.6	8.8
ND11I-XX-20-A-XXX	2500	16.8	14.3	3.4	2.2	13.2	6.6
ND11I-XX-40-A-XXX	3500	8.4	7.4	3.4	2.2	11.0	5.5
ND11I-XX-10-B-XXX	3500	33.5	26.7	3.4	2.2	17.6	8.8
ND11I-XX-20-B-XXX	4500	16.8	14.3	3.4	2.2	13.2	6.6
ND11I-XX-30-B-XXX	6000	11.2	9.8	3.4	2.2	12.1	6.1
ND11I-XX-40-B-XXX	7000	8.4	7.4	3.4	2.2	11.0	5.5

## ND12I



Input: 12 / 24V DC  
 Max. Rated Load: 3500N (ACME)  
 7000N (Ball Screw)  
 Max. Static Load: 4500N (ACME)  
 13600N (Ball Screw)  
 Max. Speed at No Load: 67.1mm/s  
 Stroke: 100~600mm  
 Duty Cycle: 25%

IP Level: IP66 / IP69K  
 Min. Installation Dimension: 219mm+Stroke  
 Operating Temperature: -25~+65  
 Certificate: CE, EMC Directive 2014/30/EU  
 ACME type or ball screw type  
 Overload protection by clutch  
 Option: Potentiometer  
 Adjustable limit switches  
 External adjustable reed switch



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
ND12I-XX-10-A-XXX	1500	33.5	26.7	3.4	2.2	17.6	8.8
ND12I-XX-20-A-XXX	2500	16.8	14.3	3.4	2.2	13.2	6.6
ND12I-XX-40-A-XXX	3500	8.4	7.4	3.4	2.2	11.0	5.5
ND12I-XX-05-B-XXX	2500	67.1	47.2	3.4	2.2	26.4	13.2
ND12I-XX-10-B-XXX	3500	33.5	26.7	3.4	2.2	17.6	8.8
ND12I-XX-20-B-XXX	4500	16.8	14.3	3.4	2.2	13.2	6.6
ND12I-XX-30-B-XXX	6000	11.2	9.8	3.4	2.2	12.1	6.1
ND12I-XX-40-B-XXX	7000	8.4	7.4	3.4	2.2	11.0	5.5

# Actuator

## ND13I



Input: 12 / 24V DC  
 Max. Rated Load: 1200N (ACME)  
 4000N (Ball Screw)  
 Max. Static Load: 1800N (ACME)  
 6000N (Ball Screw)  
 Max. Speed at No Load: 35.0mm/s  
 Stroke: 100~350mm  
 Duty Cycle: 10%

IP Level: IP54 / IP65  
 Min. Installation Dimension: 215mm+Stroke  
 Operating Temperature: -25~+65  
 Certificate: UL E356466  
 ACME type or ball screw type  
 Stainless steel extension tube  
 Overload protection by clutch  
 Option: Hall effect sensor  
 External adjustable reed sensor  
 Motor orientation



Model No.	Max. Push Load (N)	Max. Pull Load (N)	Speed (mm/s)		Current (A)			
			No load	Full load	No load		Full load	
					12V	24V	12V	24V
ND13I-XXFDA-XXX.XXX	1200	1200	35	25	2	1	14	7
ND13I-XXF4B-XXX.XXX	4000	4000	10	7	2	1	10	5

## ND10SI



Input: 12 / 24V DC  
 Max. Rated Load: 5500N (ACME)  
 9000N (Ball Screw)  
 Max. Static Load: 13600N (ACME)  
 17100N (Ball Screw)  
 Max. Speed at No Load: 5.6mm/s  
 Stroke: 450 / 600 / 900mm  
 Duty Cycle: 10%

IP Level: IP65  
 Min. Installation Dimension: 314mm+Stroke  
 Operating Temperature: -25~+65  
 Certificate: EMC Directive 2014/30/EU  
 ACME type or ball screw type  
 Overload protection by clutch  
 Steel extension tube  
 Option: Hall effect sensor / reed sensor /  
 optical encoder / potentiometer  
 Stainless steel extension tube



Model No.	Max. Dynamic Load (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
NID10S-XX40E5BXXX-XXXXXXX	9000	5.5	4.4	1.8	0.9	7.2	3.6
NID10S-XX40ESAXXX-XXXXXXX	5500	5.6	4.5	1.8	0.9	7.8	3.9



## ND16I



Input: 24V DC  
 Rated Load: 5500N  
 Max. Static Load: 13600N  
 Max. Speed at No Load: 3.3mm/s  
 Stroke: 450 / 600 / 900mm  
 Duty Cycle: 10%

IP Level: IP65  
 Min. Installation Dimension: 363mm+Stroke  
 Operating Temperature: -20~+65  
 Certificate: EMC Directive 2014/30/EU  
 ACME type spindle  
 Preset limit switches  
 Steel extension tube  
 Option: Hall effect sensor / reed sensor / potentiometer  
 Stainless steel extension tube



Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
		No load	Full load	No load	Full load
ND16I-24D5AXXX-XXXX0XX	5500	3.3	2.67	0.8	2.3

## ND18I



Input: 24 / 36V DC  
 Rated Load: 9000N (ACME)  
 12000N (Ball Screw)  
 Max. Static Load: 36000N  
 Max. Speed at No Load: 3.3mm/s  
 Stroke: 610 / 914 / 1219 mm  
 Duty Cycle: 10%

IP Level: IP65  
 Min. Installation Dimension: 453mm+Stroke  
 Operating Temperature: -25~+65  
 ACME type or ball screw type  
 Preset limit switches  
 Option: Hall effect sensor / reed sensor / potentiometer  
 Customized connector  
 (trunnion mount or customized clamp)  
 Cable outlet from body side or bottom



TRUNNION MOUNT

CUSTOMIZED CLAMP

Model No.	Max. Push/Pull Load (N)	Speed (mm/s)		Input Voltage (V)	Current (A)	
		No load	Full load		No load	Full load
ND18I-2458S3AXXX-XXXXXXX	9000	2.0	1.5	24	0.4	4.0
ND18I-3658S3AXXX-XXXXXXX	9000	2.0	1.5	36	0.4	2.5
ND18I-2458S5BXXX-XXXXXXX	12000	3.3	2.7	24	0.4	2.4
ND18I-3658S5BXXX-XXXXXXX	12000	3.3	2.7	36	0.4	1.8



## NLC1D



**Input:** 24V DC  
**Max. Thrust:** 2000N  
**Max. Static Load:** 3000N  
**Max. Speed:** 13.0mm/s  
**Stroke:** 400mm  
**Dimensions:** 175(W)\*140(D)\*350~750(H)mm  
**Static Bending Moment:** 500Nm  
**Dynamic Bending Moment:** 250Nm  
**Duty Cycl:** 10%  
**IP Level:** IPX6  
**Certificate:** CE, EMC Directive 93/42/EEC  
**Noise Level:** 50dB  
**Life Cycle:** Over 5000 cycles  
**Preset limit switches**  
**Anodized Aluminum body**  
**Option:** Hall effect sensor  
 Safety nut



Model No.	Max. Push/Pull Load (N)	Typical Speed (mm/s)		Typical Current (A)@ 24V DC	
		No load	Full load	No load	Full load
NLC1D-24RH-350.750-XXXXX	2000	13	10	0.9	4.0

## NLC2D



**Input:** 24V DC  
**Max. Thrust:** 2000N  
**Max. Speed:** 18.0mm/s  
**Stroke:** 140 / 261 / 450mm  
**Static Bending Moment:** 1000Nm  
**Dynamic Bending Moment:** 750Nm  
**Duty Cycl:** 10%  
**IP Level:** IP21  
**Certificate:** CE, EMC Directive 2014/53/EU, EN55014-1, EN55014-2  
**Preset limit switches**  
**Anodized Aluminum body**  
**Option:** Hall effect sensor



Model No.	Max. Push/Pull Load (N)	Typical Speed (mm/s)		Typical Current (A)@ 29V DC	
		No load	Full load	No load	Full load
NLC2D-24H6-XXXLXXXX-XXXXX	2000	18	13	1.1	4.5

# Actuator

## NKL5D



Input: 24V DC  
 Max. Load: 800N  
 Max. Speed: 40.0mm/s  
 Retracted Length: 574mm  
 Stroke: 650mm  
 Dimensions:  $\Phi$ 70mm  
 Duty Cycle: 10%  
 IP Level: IP20  
 Certificate: CE, EMC Directive 2014/53/EU  
 Hall effect sensor



Model No.	Max. Push Load (N)	Speed (mm/s)		Current (A)@ 24V DC	
		No load	Full load	No load	Full load
NKL5D	800	40	30	0.8	3.5

## NKL3D



Input: 24V DC  
 Max. Load: 800N  
 Max. Speed: 40.0mm/s  
 Retracted Length: 553mm  
 Stroke: 650mm  
 Dimensions:  $\Phi$ 33mm  
 Duty Cycle: 10%  
 IP Level: IP20  
 Certificate: CE, EMC Directive 2014/53/EU  
 Hall effect sensor



Model No.	Max. Push Load (N)	Typical Speed (mm/s)		Typical Current (A)@ 24V DC	
		No load	Full load	No load	Full load
NKL3D	800	40	30	0.8	3.5

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## NKS2D



Stroke: 300~500mm

Lead: 8 / 12mm

Installation Dimensions: 55mm+Stroke

Gear Ratio: 1:1

Drive by hexagon metal rod (diagonal diameter 6mm)

Recommend to use with DKM4-LF and DKC3



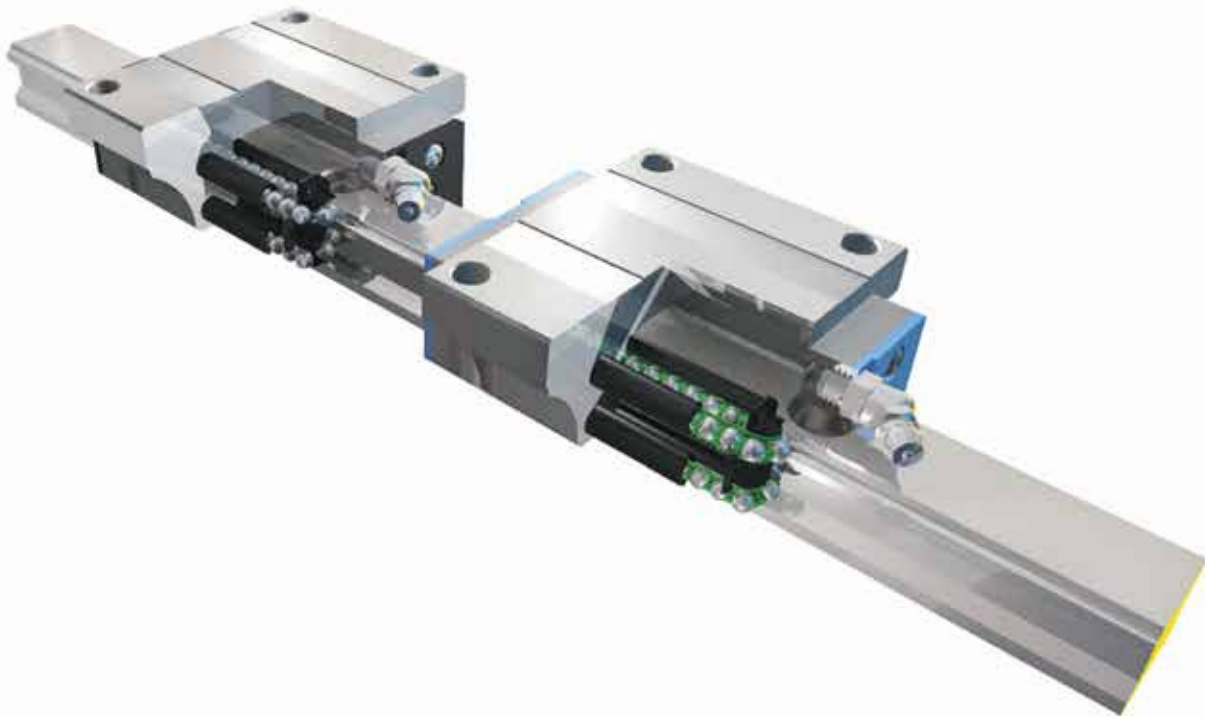
### Notes:

# Profile Rail

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## COMMON RAIL DESIGN

One Rail Geometry for All Blocks



The modular structure of our linear guides allows for one type of rail to be used for caged and non-caged carriages, significantly lowering inventory costs.

# Linear Actuators

## ROD-STYLE

### Types of Motors

Stepper Motor

Servo Motor

AC Motor

DC Motor



## RODLESS STYLE

### Drive Types

Acme Screw

Ball Screw

Rack & Pinion

Linear Motor



# Linear Products

Standard  
Ball Bushing



Self-Aligning  
Ball Bushing



Self-Aligning  
Pillow Blocks



Ball Screws



Ball Screw  
Support Bearings



Shafting



## Commercial Actuator Catalog



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1600 East Bishop Court, Mt. Prospect, IL 60056

**NTN Automation**  
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