07

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QUALITY IS OUR FIRST PRIOITY

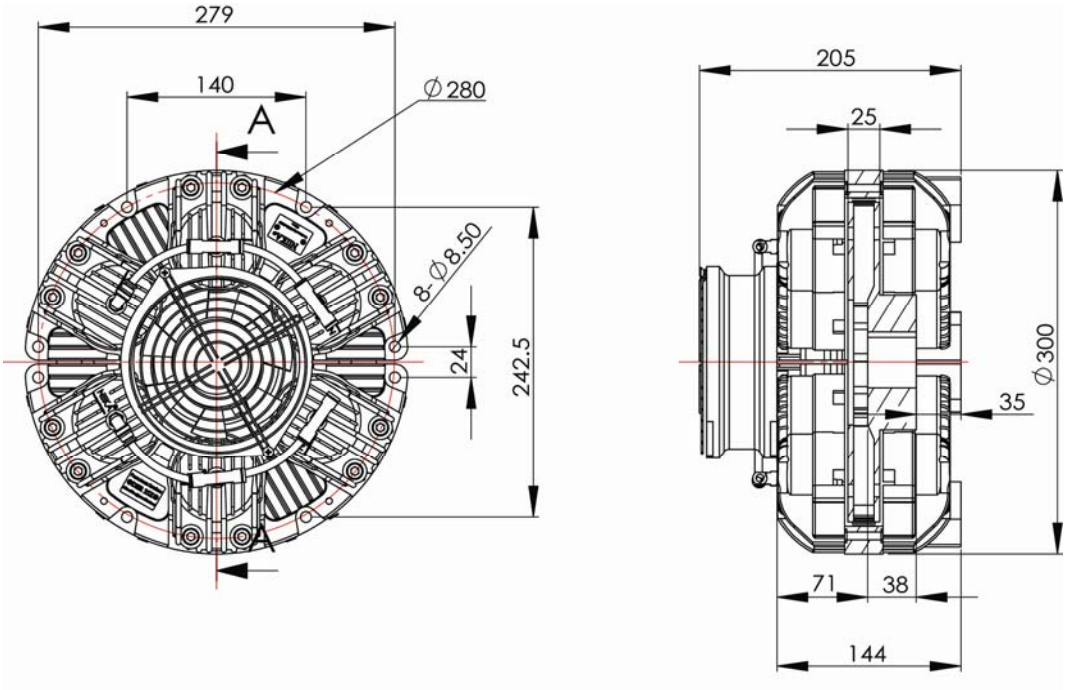
FAN COOLED BRAKE

NIKA®

The primary function of brakes is the conversion of mechanical energy into heat, which is then dissipated into the atmosphere.
The amount of heat which can be dissipated by air cooled Disc Brakes are dependent on a high rotational speed, large disc diameter, and large radiant surface. With the addition of an electric fan fitted to the centre of the housing, the best possible thermal power dissipation was achieved without high dependency on speed, and avoiding the need to increase the disc diameter in continuous slipping applications
Suitable for high heat dissipation

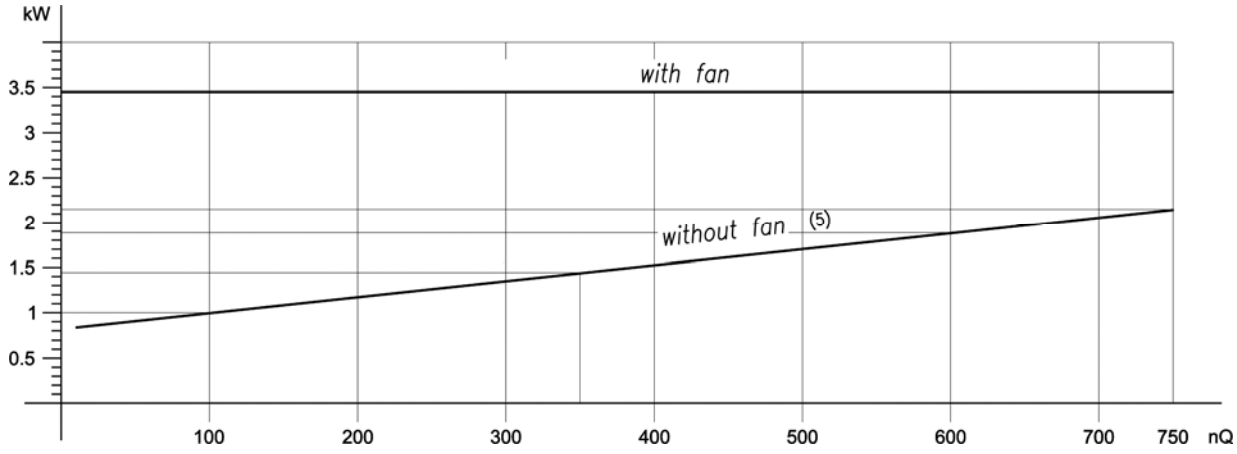
ADVANTANGE

* Dimensionally smaller units, giving a more compact machine design
* Reduction in price due to smaller design
* Lower top speeds minimize the wear of the linings
* Constant controllable torque from a stable friction lining material
* Suitable for all types of applications
* Suitable for high heat dissipation



250

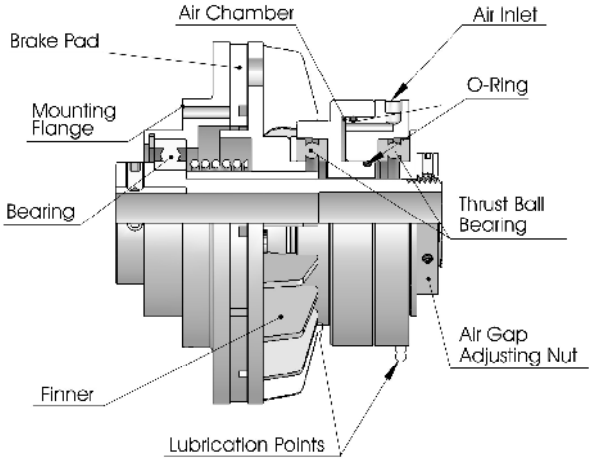
MODULE	DYMANIC TORQUE kgm		MAX SPEED	PILOT BORE	VOLTAGE	WEIGHT
	6 bar	0.2 bar	min¹			kg
DBR-252	28	4.6	2670	30	230V	15
DBR-254	56	4.6	2670	30	230V	16
DBR-256	84	4.6	2670	30	230V	17



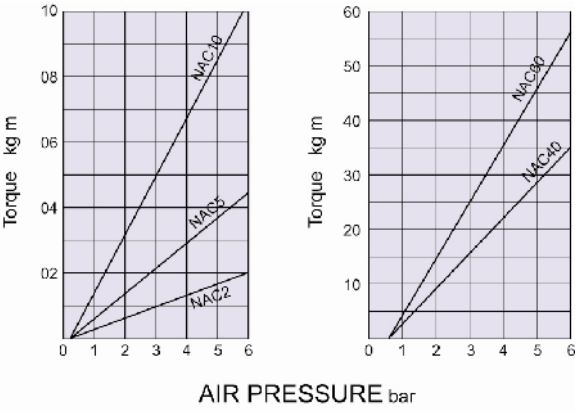
※ Rated torque may vary depending on temperature and speed.
※ Rated torques at 0.2 bar refers to one braking unit only.
※ The thermal capacity depends on the brake working conditions. Please contact our Technical Office.
※ Using the brake to its thermal capacity limit can cause accelerated wear of the braking pads.
※ The thermal capacity, without fan, is depending on the effective cooling speed nQ. Please contact our Technical Office.

NAC Pneumatic-Coaxial Pneumatic clutch is linked with air pressure on, and restoration relying on spring to open up. Disc relies on air pressure to slide along the direction of the axis, contacting the friction plate. Disc, the friction boards and so on, are assembling to the wheel to come into an integrated structure. Friction plate can be parted by screwing nuts

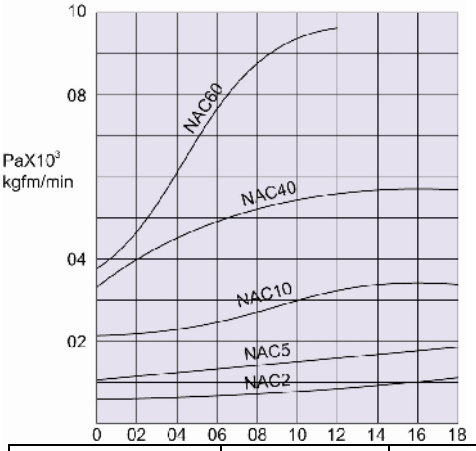
● Basic construction



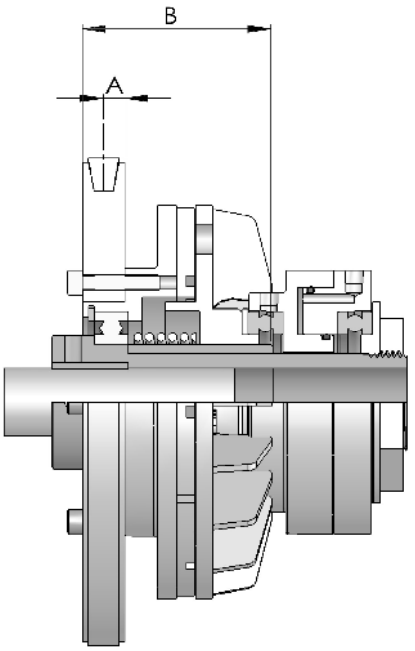
● Torque versus Pressure



● Heat Dissipation



● Minimum shaft length to allowed

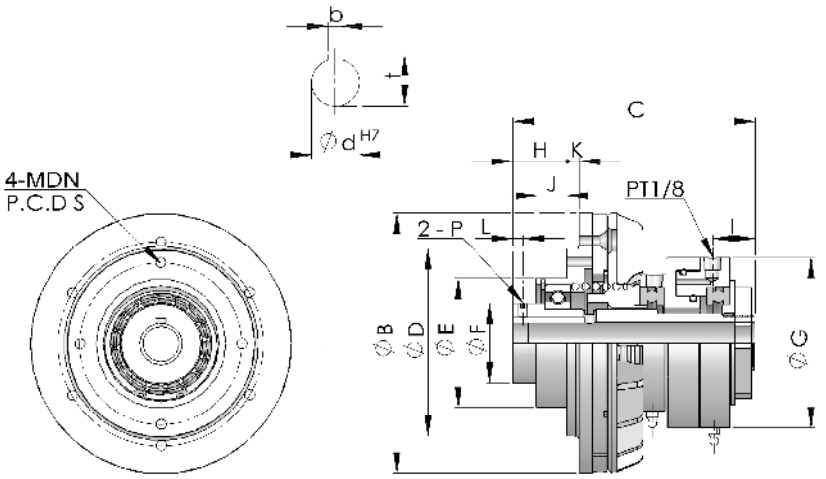


SIZE	10^{3} rpA	B
NAC 2	5-10	50
NAC5	6~11	65
NAC10	7~12	95
NAC40	0~19	110
NAC60	0~33	128

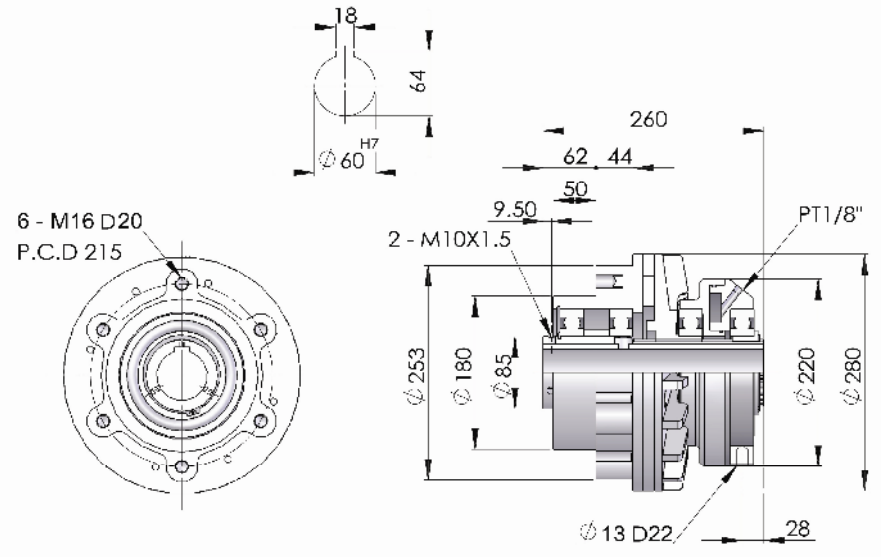
SIZE	NAC 2	NAC 5	NAC 10	NAC 40	NAC 60
Static Torque kgfm	2	5	10	40	60
Bore Dia φd^{H7}	20	25	35	50	60
Keyway b x t x l	5 x22.3 x 30	6X27.8x30	10X38.3X40	12X53.3X60	18X64X95
Unit Weight kg	3	5.5	13	23	50

These clutches are normally air –operated at pressure up to 6 bar/ 90 psi.
The maximum energy per engagement figures quoted is based on a frequency of engagement not exceeding 30 per hour.
The clutch assembly comes lubricated and ready to install. Grease nipples are fitted to the piston and cylinder for periodic lubrication of the thrust bearing. Use a good grade bearing lubricant. Do not over grease.

NAC 2-40



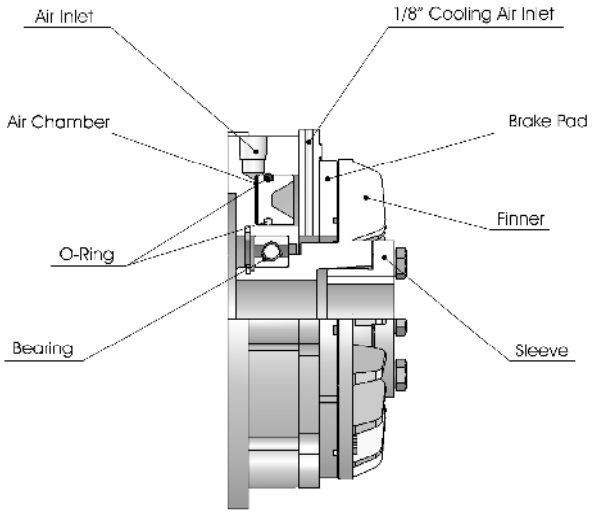
NAC-60



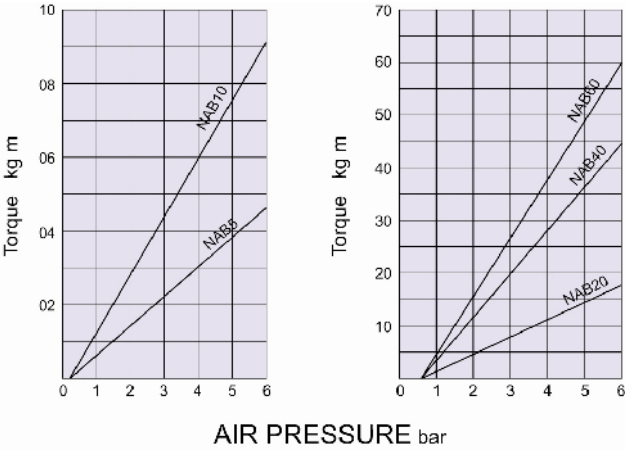
Size	B	C	D	E	F	G	H	I	J	K	L	M	N	P	S
NAC 2	115	120	90	65	35	90	24.5	18	17	5	5.5	M6	11	M6	80
NAC 5	153	142	110	76	47	100	32	24	18	7	6	M6	14	M6	95
NAC 10	205	185	140	105	69.5	138	38	30	22	17	9	M8	16	M10	125
NAC 40	258	226	164	125	82	175	51	38	40	24	8	M10	16	M10	145

NAB-T Pneumatic brake, is to use the cone-shaped bushings with wedge to connect with the axis, the purpose of the friction plates is that in the case of maintaining machinery, it can exchange the structure. Using the piece installed on the disk of the wheel to emit the heat generated of rubbing. Friction plate is double-board, through the hole of the wheel, after taking out the screw with screwdrivers, then exchanging friction plate.

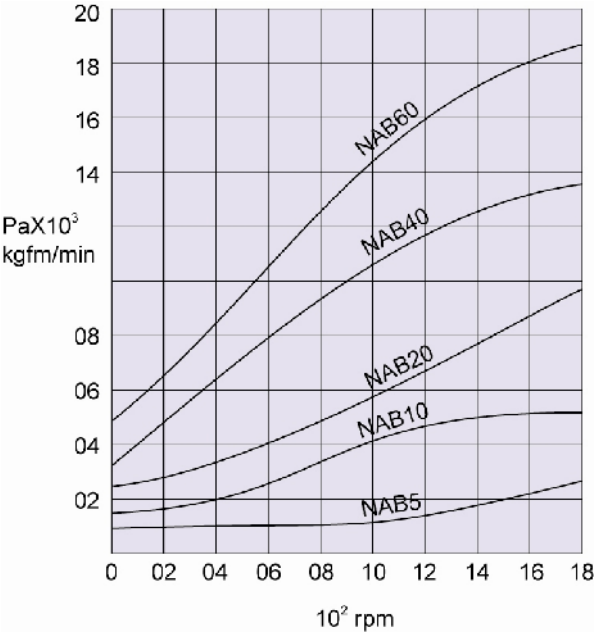
● Basic construction



● Torque versus Pressure

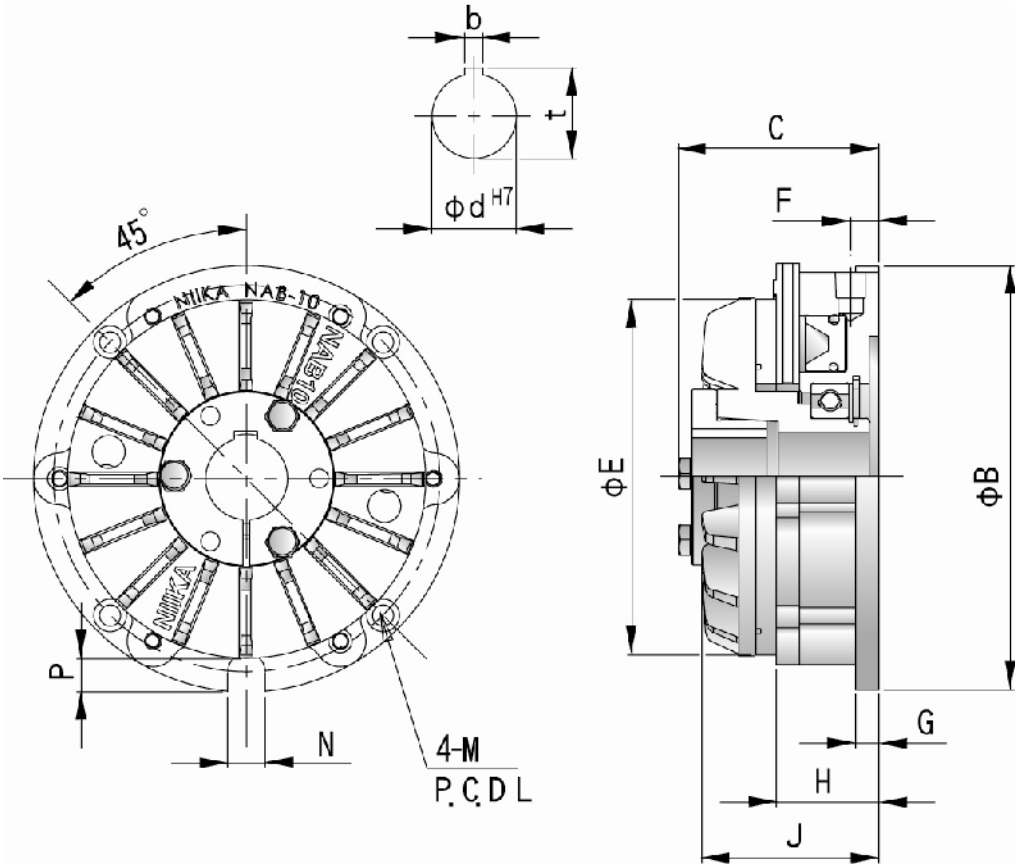


● Heat Dissipation



Size	NAB 5T	NAB 10T	NAB 20T	NAB 40	NAB 65T
Static Torque kgm	5	10	20	40	65
Bore Dia φd^{H7}	20 25	25 35	35 50	50 75	50 75
Keyway b x t	5X22.3 6x27.8	6x27.8 10x38.3	10x38.3 12x53.3	12 x 53.3 18x79.4	12x53.3 18x79.4
Unit Weight kg	4	7.5	14	32	40

● Approximate Dimension

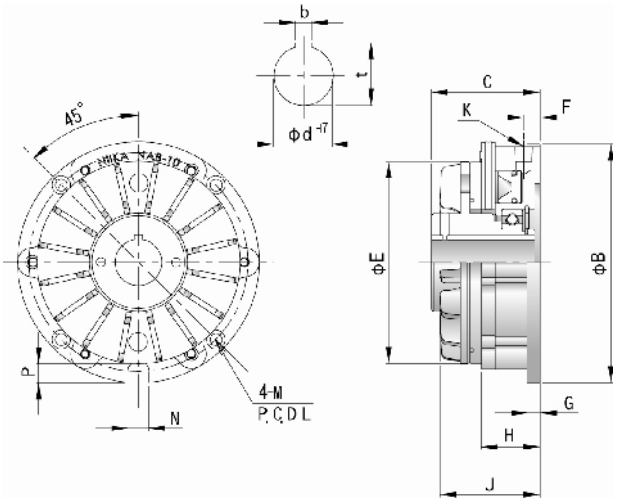


Size	B	C	D	E	F	G	H	J	K	L	M	N	P
NAB 5T	150	68	27.8	117	12	7	34.5	64	PT1/4	135	7	10	16.5
NAB 10T	182	85.5	38	153	12	10	44	77	PT1/4	165	9	16	17
NAB 20T	228	96	57	204	11	10	47	87	PT1/4	210	9	20	20
NAB 40T	302	120	83	256	18	13	58.5	114	PT1/4	278	14	22	22
NAB 65T	350	141	83	280	20	18	70	134	PT1/4	320	18	25	30

NIIKA Limited reserves the right to modify or change the design without prior notice.

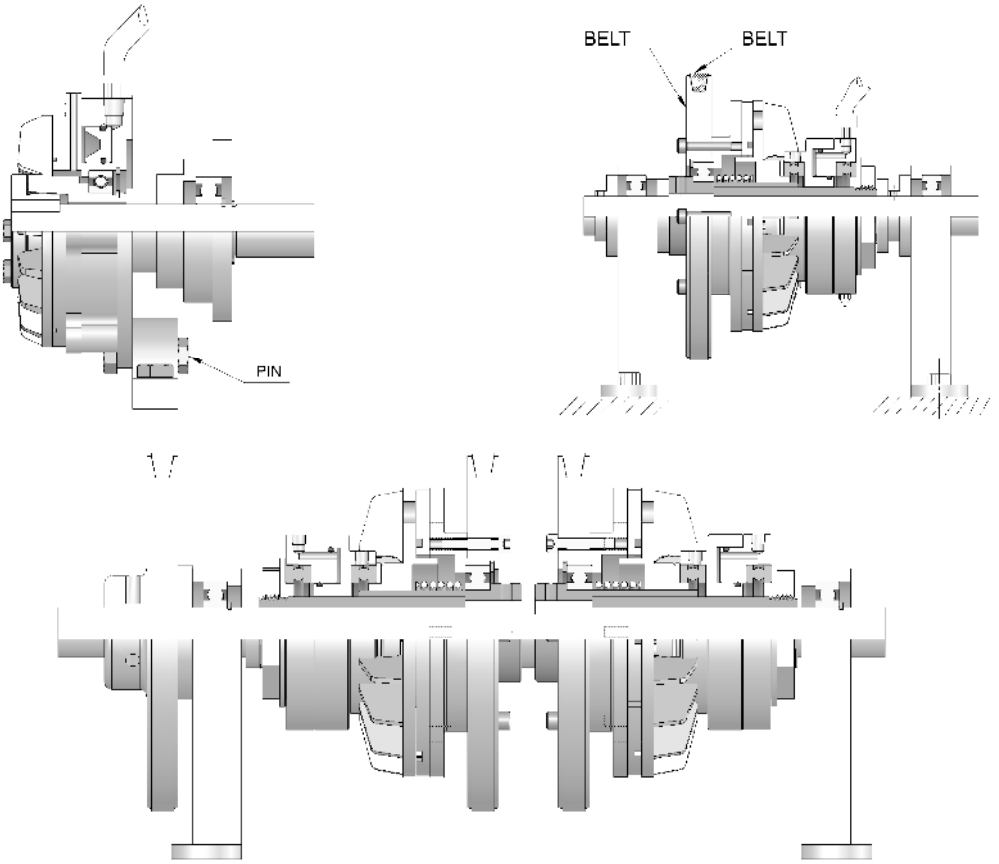
NAB 5S-10S

Size	NAB 5S	NAB 10S
Static Torque kgm	5	10
Bore Dia φd^{H7}	25	25 35
Keyway b x t	6x27.8	6x27.8 10x38.3
Unit Weight kg	4	7.5



Size	B	C	E	F	G	H	J	K	L	M	N	P
NAB 5S	150	65	117	12	7	34.5	64	PT1/4	135	7	10	16.5
NAB 10S	182	82	153	12	10	44	77	PT1/4	165	9	16	17

Mounting Example



Stable performance of the disc brakes which withstand frequent uses.
These brakes do not require an adjustment while they are in use, and their repairs are simple.
While their braking forces may be arbitrarily adjusted, the range of braking force is widened.
These brakes are resistant to dust and wetting, and withstand high ambient temperatures.
Their prices are low, and their deliveries are made promptly.

● **Calculation on the braking torque**

Braking torque

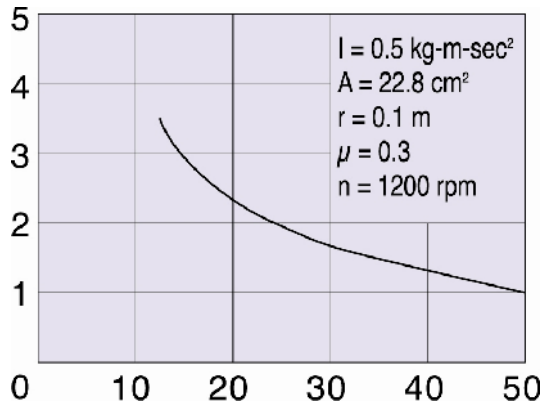
$T = 2 \mu A P r$

$r = 0.5 d - 0.03$

T : Braking torque per one brake kg-m
μ : efficient of friction. μ0.3
A : Area of cylinder cm2
P : Operating pressure kg / cm2
r: Effective braking radius m
d : Outside diameter of disc m

Stopping time

$$t_B = \frac{nI}{30TN} = \frac{nI}{60\mu APrN} = \frac{n\,GD^2}{120\,TgN}$$



t_B : Stopping time sec
I : $GD^2 / 4g$ Moment of inertia kg m sec^2
n : Number of initial revolutions rpm
N : Number of brakes used at the same time
g : 9.8 m / sec^2

Disc temperature

The disc temperature goes up at the time of braking. Although in many cases, the temperature need not be taken into account, when rotary bodies involving large energies are frequently braked, or when this brake is continuously used as a constant torque brake, the normal working temperature of the disc should be calculated according to the following equation lest, 200 ay be exceeded at all times .

a. Braking objects in linear motion

$$E = \frac{WV^2}{2g} \times f$$

E : Energy generated kg m / min
W : Weight kg
V : Speed m / sec
f : Braking frequency rpm / min
g : 9.8 m / sec^2

DBF
DISC BRAKES CALIPER air applied spring released

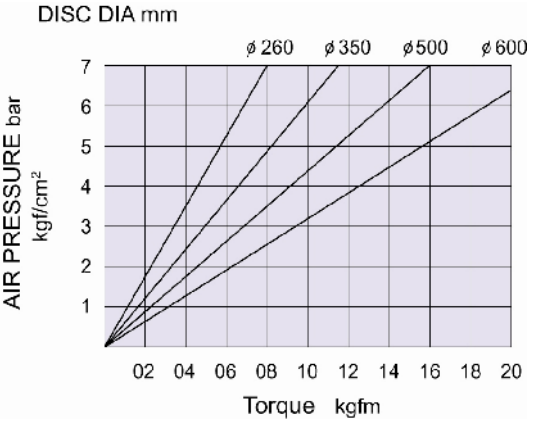
NIIKA®

The DBF is a type of small brake which bottom is stationary,
adapts differently way of installation,
Also can use in the brake of beeline movement.
Big friction area can extend the cycle of maintenance and long life.
If it installs certain brakes on one disc, torque also enlarge
along with it certain time

The **DBF** series disk brake is suitable for all thickness of the disc by changing the special spacer.

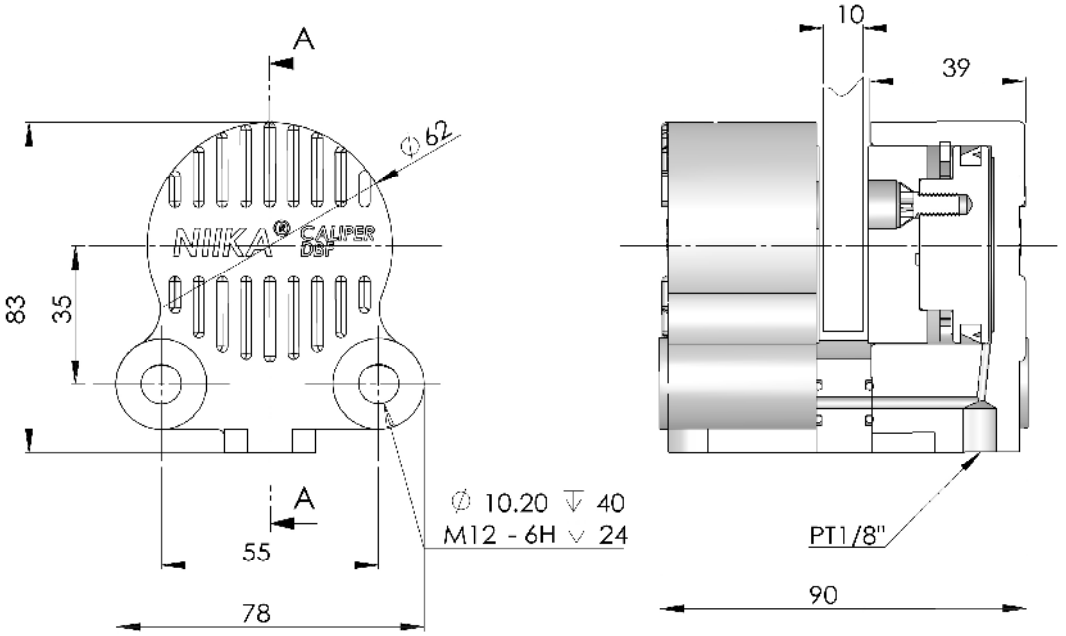
Size	**DBF 10**
Maximum air pressure	7 kg/cm^2
Braking force 5 kg/cm^2 μ=0.33	64 kgf
Areas of cylinders	19.63 cm^2
Disc O. D. mm	220↑
Disc thickness	10 mm
Unit Weight	2 kg

● **Torque versus Pressure**



Standard DBF for disc thickness 10 mm but can modify to suit disc thickness up to 15MM.

APPROXIMATE DIMENSION



Warning : The initial torque on new units can be 30% to 50% less then the catalogue value until the friction facing and friction disc are lapped or worn in.

NIIKA Limited reserves the right to modify or change the design without prior notice.

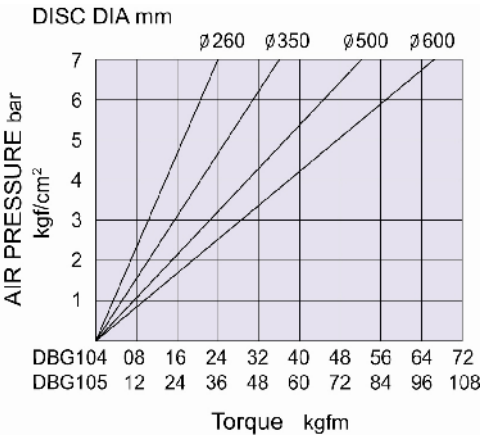
DBG
DISC BRAKES CALIPER air applied spring released

As a type of economical brake, it can provide stably and effective power of braking.
The vertical installation can saves the space and the heat of rubbing surface can dissipate rapidly.
The friction part is easy to replace, and it does not contain any asbestos,
Brake-disc thickness covers from 10mm to 20mm.
To control the deceleration of moving parts for small
and medium powers, the best solution is the combination of
a brake disc with one or more pneumatic calipers.

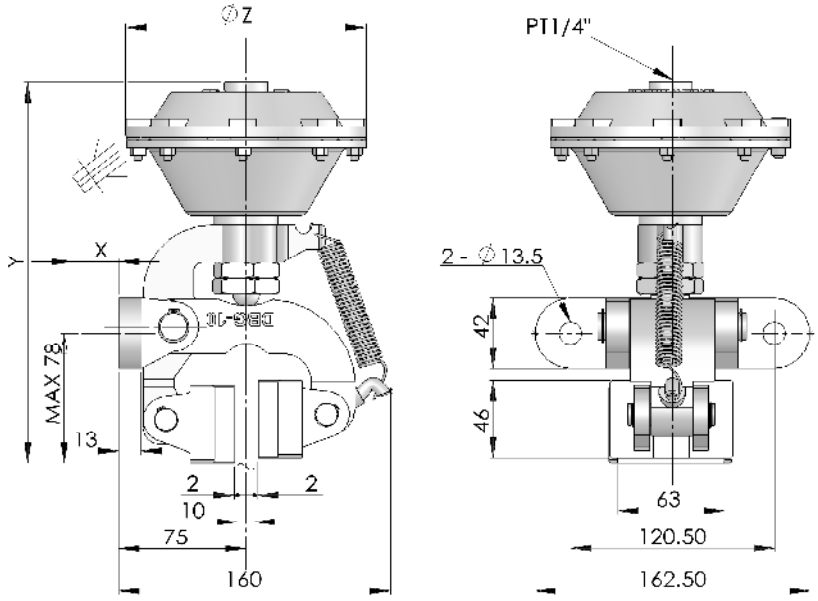
Torque Formula : Braking Torque (kgm) =Braking Force (kg) x Effective Disc Radius (Actual)(mm)

Size	DBG 104	DBG 105
Maximum under overload	7 kg/cm²	7 kg/cm²
Compression ratio	0.74	0.74
Disc thickness	10 mm	10 mm
Disc O. D. mm	200↑	200↑
Unit Weight	5.5 kg	6 kg

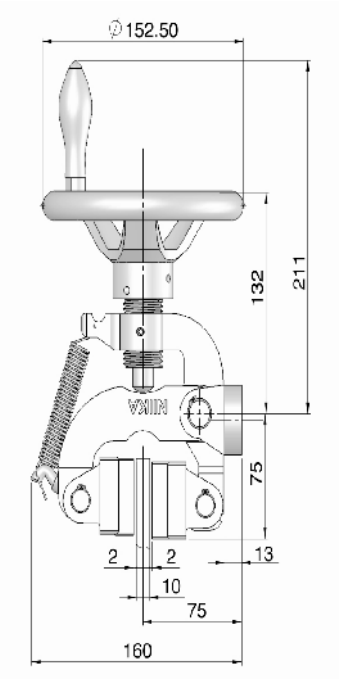
● **Torque versus Pressure**



APPROXIMATE DIMENSION



Size	X	Y	φZ
DBG 104	18	145	142
DBG 105	36	160	177



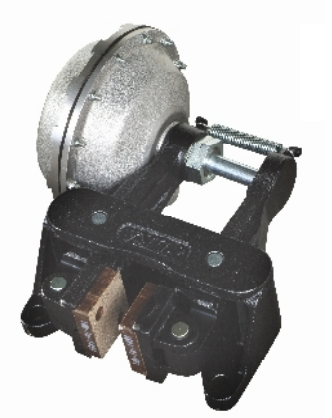
DBG 10 M

Warning : The initial torque on new units can be 30% to 50% less then the catalogue value until the friction facing and friction disc are lapped or worn in.
NIIKA Limited reserves the right to modify or change the design without prior notice.

DBH
DISC BRAKES CALIPER air applied spring released

NIIKA®

The type brake is for horizontal-type installation,
it can provides approximately 2 times
of braking powder than vertical installation.
Add the expandable shrapnel to guarantee the brake balance,
The friction part is easy to replace, and it does not contain any asbestos,
To control the deceleration of moving parts for small
and medium powers, the best solution is the combination of
a brake disc with one or more pneumatic calipers.



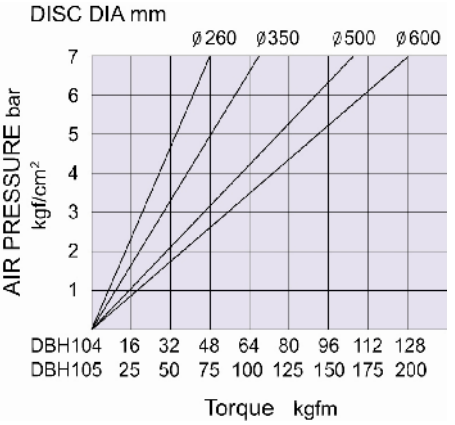
LEFT
TYPE

Torque Formula : Braking Torque (kgm) =Braking Force (kg) x Effective Disc Radius (Actual)(mm)

Size	DBH 104	DBH 105
Maximum under overload	7 kg/cm^2	7 kg/cm^2
Compression ratio	1.83	1.83
Disc thickness	10 mm	10 mm
Disc O. D. mm	200↑	200↑
Unit Weight	8.5 kg	9 kg

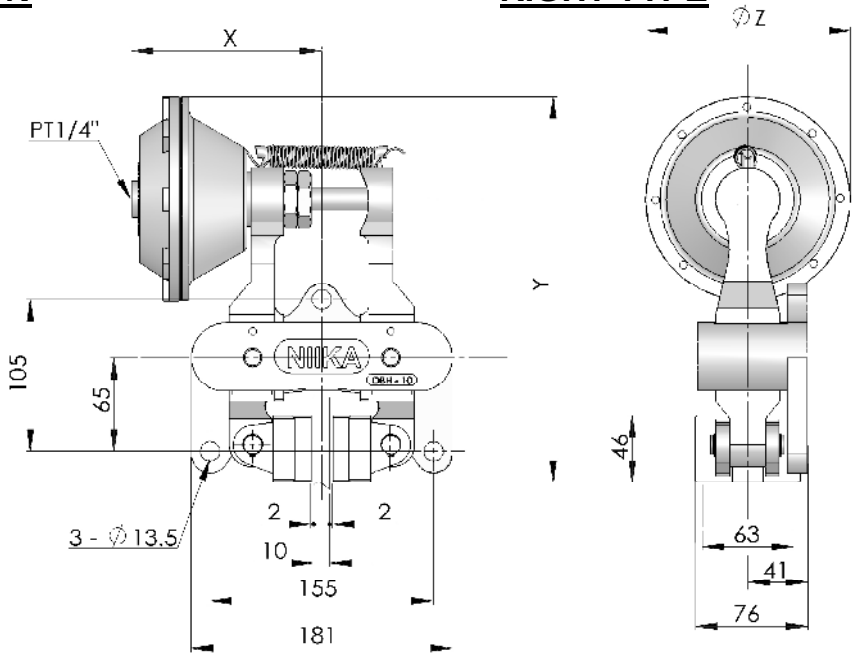
Every **horizontal** caliper separate into the left and right type.
Please indicate left or right side type when order.

● **Torque versus Pressure**



APPROXIMATE DIMENSION

RIGHT TYPE



Size	X	Y	φZ
DBH 104	132	267.5	142
DBH 105	152	285	177

Warning : The initial torque on new units can be 30% to 50% less then the catalogue value until the friction facing and friction disc are lapped or worn in.
NIIKA Limited reserves the right to modify or change the design without prior notice.

DBH
DISC BRAKES CALIPER air applied spring released

NIIKA®

The type brake is for horizontal-type installation,
it can provides approximately 2 times
of braking powder than vertical installation.
Add the expandable shrapnel to guarantee the brake balance,
The friction part is easy to replace, and it does not contain any asbestos,
To control the deceleration of moving parts for small
and medium powers, the best solution is the combination of
a brake disc with one or more pneumatic calipers.

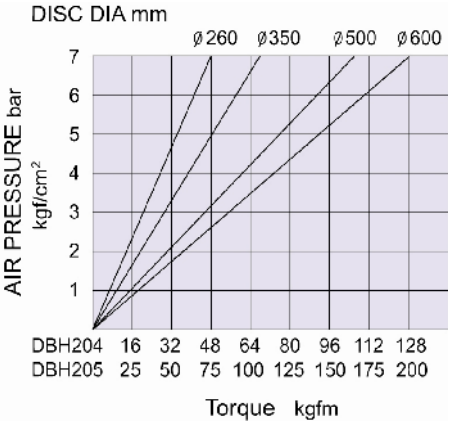
LEFT
TYPE

Torque Formula : Braking Torque (kgm) =Braking Force (kg) x Effective Disc Radius (Actual)(mm)

Size	DBH 204	DBH 205
Maximum under overload	7 kg/cm²	7 kg/cm²
Compression ratio	1.83	1.83
Disc thickness	20 mm	20 mm
Disc O. D. mm	200↑	200↑
Unit Weight	9 kg	9.5 kg

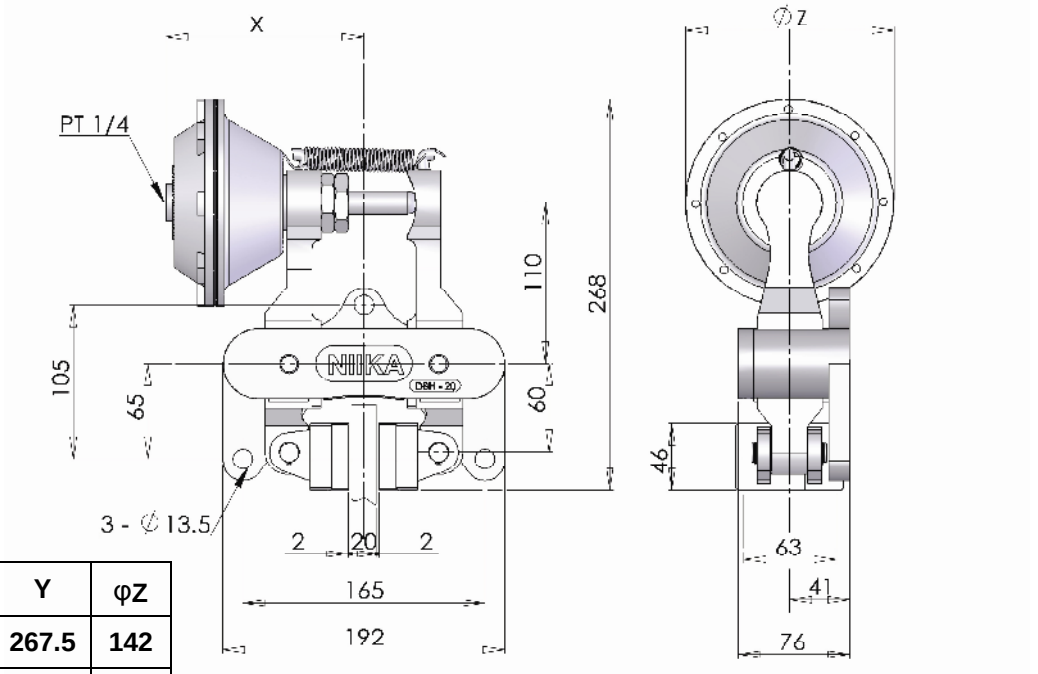
Every **horizontal** caliper separate into the left and right type.
Please indicate left or right side type when order.

● **Torque versus Pressure**



APPROXIMATE DIMENSION

RIGHT TYPE



Size	X	Y	φZ
DBH 204	135	267.5	142
DBH 205	155	285	177

Warning : The initial torque on new units can be 30% to 50% less then the catalogue value until the friction facing and friction disc are lapped or worn in.

DSH FAIL SAFE BRAKE
SPRING APPLIED AIR RELEASE

NIIKA®

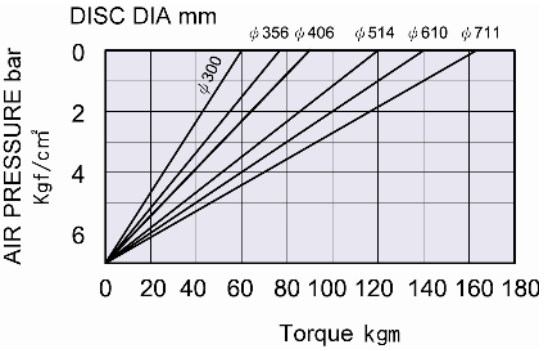
A spring-applied fail safe brake for dry-running, which can be used for both holding and dynamic applications. All types of Fail-Safe brakes therefore are offered with pneumatic released but emergency release by means of manual lever or integrated screws. Furthermore the amount of maintenance required for both the compressed air supply system and for the pneumatic brakes is small.

RIGHT TYPE

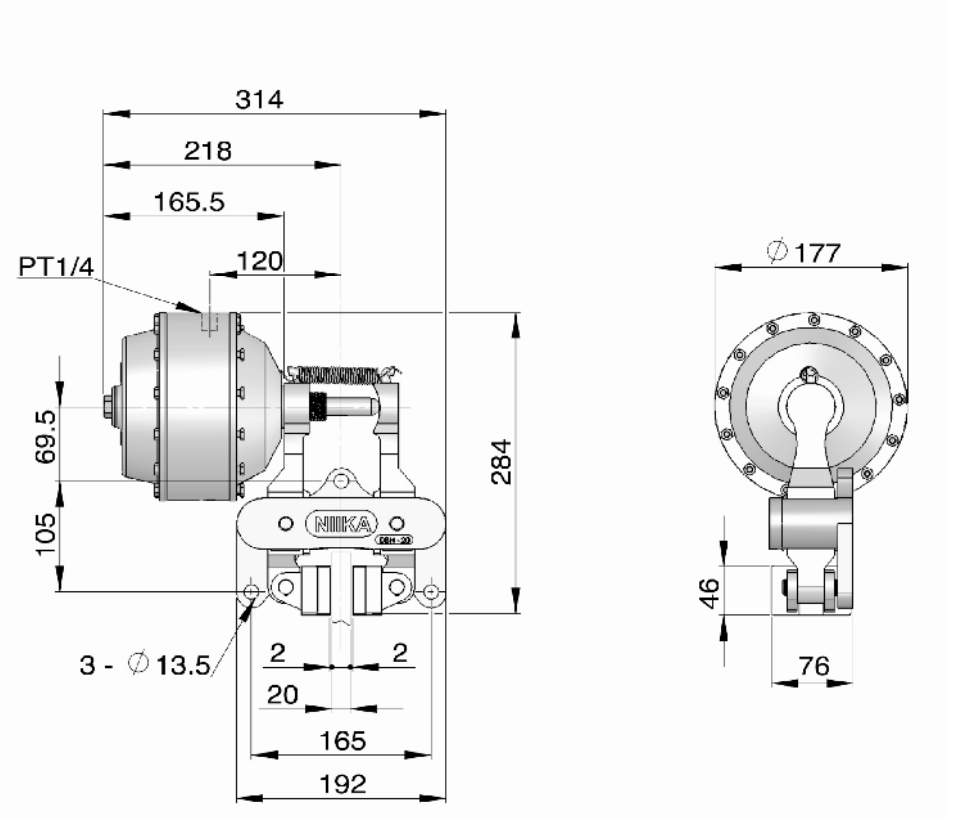
Torque Formula : Braking Torque (kgm) =Braking Force (kg) x Effective Disc Radius (Actual)(mm)

Model	DSH 205
DISC THICKNESS	20 MM
MAX AIR PRESSURE kg/cm²	7
DISC OD MM	260↑
WEIGHT	19 KGS

● **Torque versus Pressure**

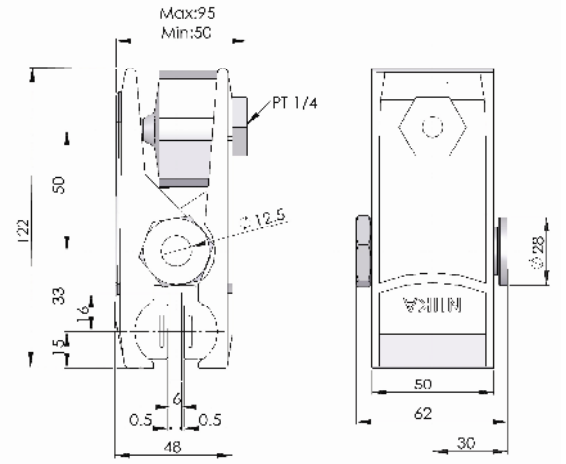


APPROXIMATE DIMENSION **LEFT TYPE**

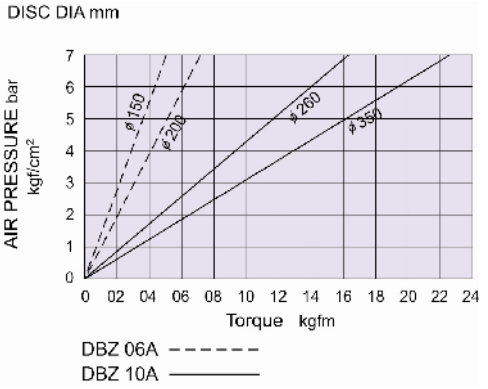


DBZ-06A DISC BRAK
AIR Disc Brake

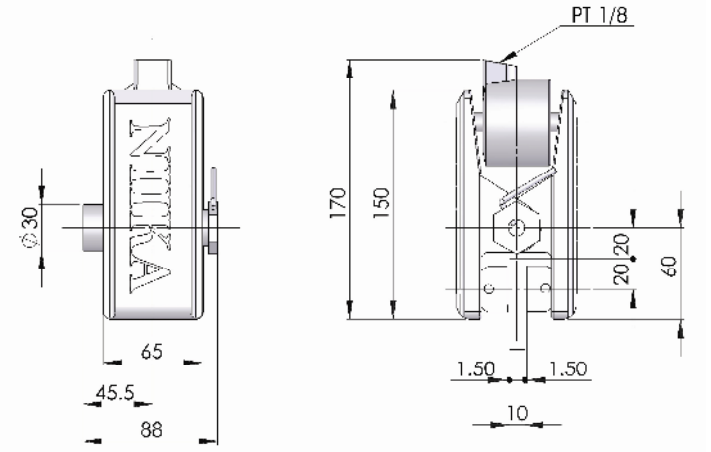
As a type of small brake, the installation is flexible, can save more installation space. Application of torque control and brake maintenance specially adapt to the light loading condition. Convenient for release of heat and maintenance, we can supply the model of manual control.



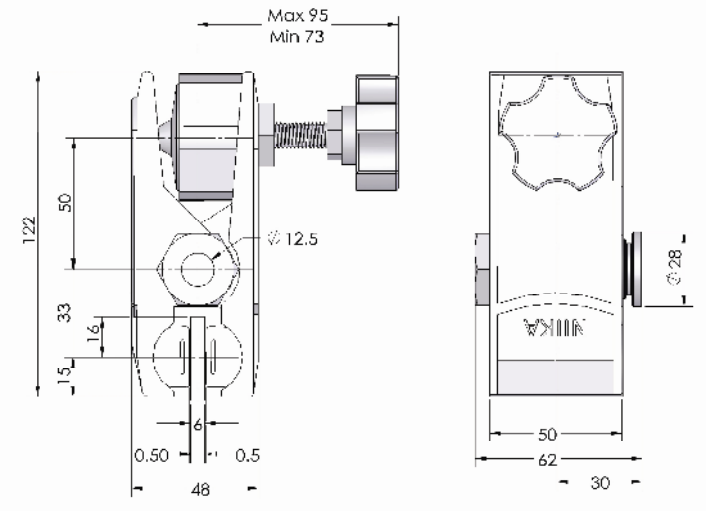
TORQUE VERSUS PRESSURE



DBZ-10A AIR Disc Brake



DBZ-06M MANUAL DISC BRAKE



DBM oil hydraulic disc brake is mainly power by brakes oil, and can also power by air-actuated matched with hydraulic booster.

The ordinary brakes fluid is required (DOT3, DOT4 or above)

The DBM brakes do not require an adjustment while they are in use, and it's repairs are simple.
The DBM brake brakes are resistant to dust and wetting, and withstand high ambient temperatures.

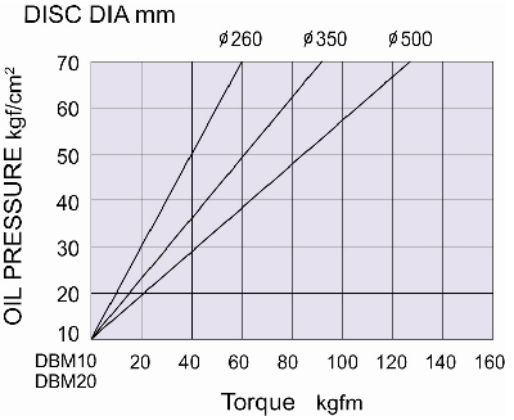
DBM brake separate into left and right type, which depends on position of oil- inlet. Please indicate left or right side type when order.

LEFT TYPE

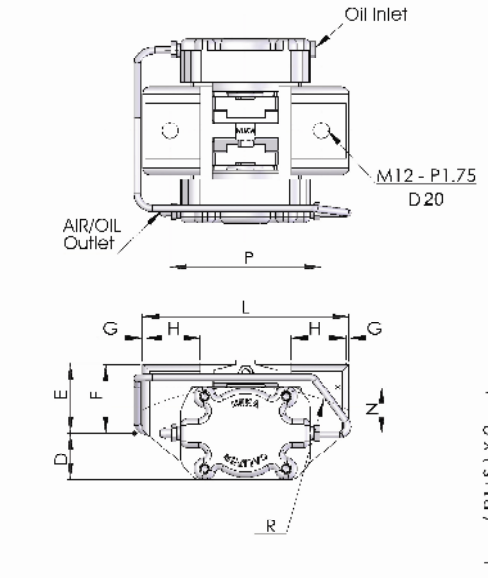
Size		DBM 10	DBM 20
Sizes of cylinders		2 1/8"	2 1/8"
Area of cylinders		22.88 cm^2	22.88 cm^2
Amount of operating Oil		About 2.5cc	About 2.5cc
Operating oil pressures	Normal working	50 kg/cm^2	50 kg/cm^2
	Maximum	70 kg/cm^2	70 kg/cm^2
Disc thickness		10 mm	20 mm
Disc O. D. mm		200↑	200↑
Unit Weight		5 kg	5.5 kg

DBM brake separate into left and right type, which depends on position of oil- inlet. Please indicate left or right side type when order.

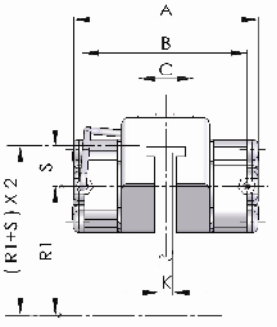
● **Torque versus Pressure**



DIMENSION



RIGHT TYPE



Size	A	B	C	D	E	F	G	H	K	L	N	P	R	S
DBM 10	135	118	40	34	51	50	2	40	10	150	34	110	350	30
DBM 20	145	128	50	34	51	50	2	40	20	150	34	110		30

Warning : The initial torque on new units can be 30% to 50% less then the catalogue value until the friction facing and friction disc are lapped or worn in.

NIIKA Limited reserves the right to modify or change the design without prior notice.

BST BOOSTER CYLINDER

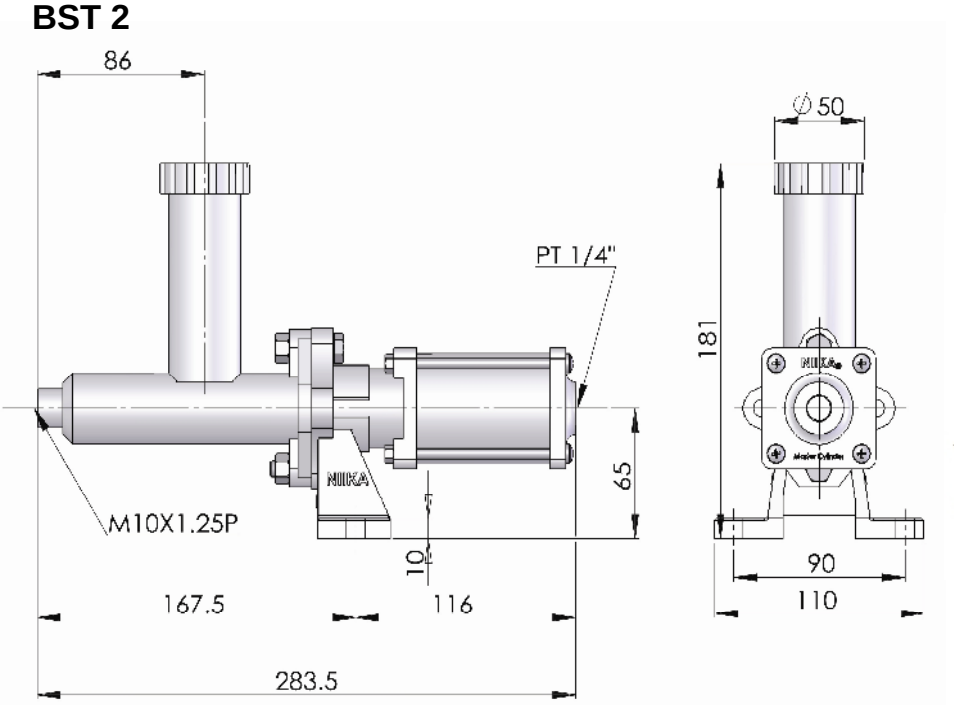
NIIKA®

The Push rod of the master cylinder for automotive use is activated by generate hydraulic pressure and actuate the brake.
The brakes fluid is required (DOT3, DOT4 or above) in automobiles.
If a new master cylinder is used, be sure to remove the check valve to eliminate remaining pressure.

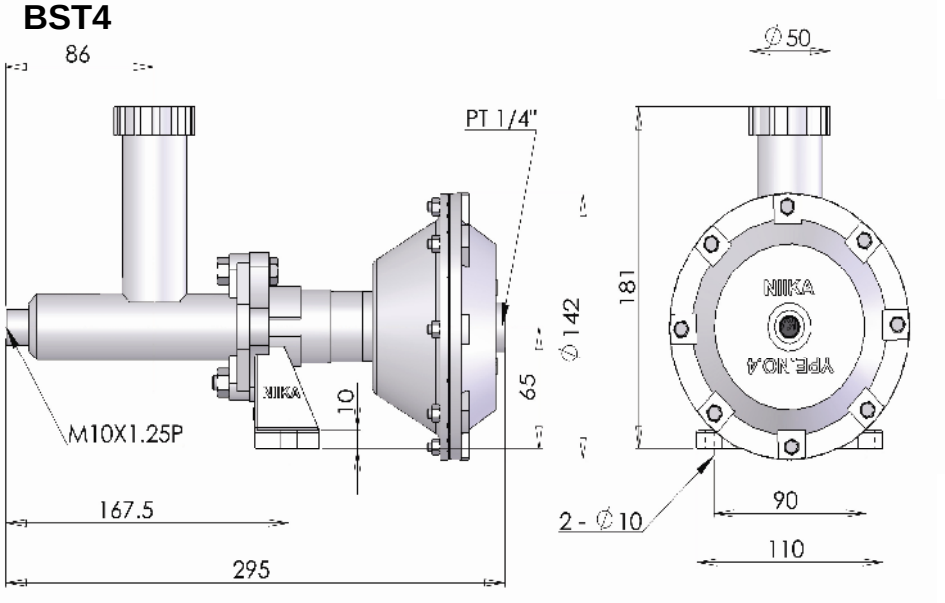
Size	BST 2	BST 4
Sizes of cylinders	2”	4”
Pressure boost ratio	7	14
Fluid delivery	9 cc	12 cc
Weight	1.6 kg	2.5 kg

APPROXIMATE DIMENSION

BST 2

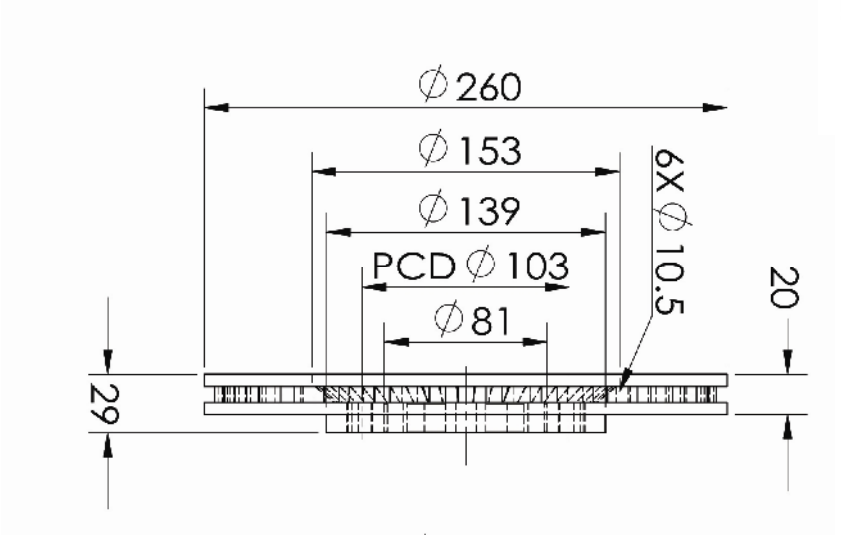


BST4

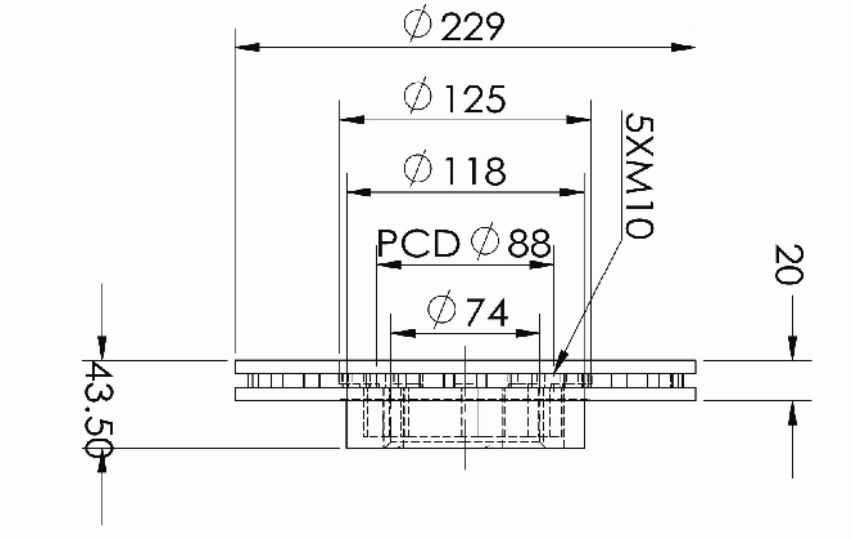


DISC-D260

Niika has developed 4 different sizes of disc for customer easy to use our caliper disc brake.

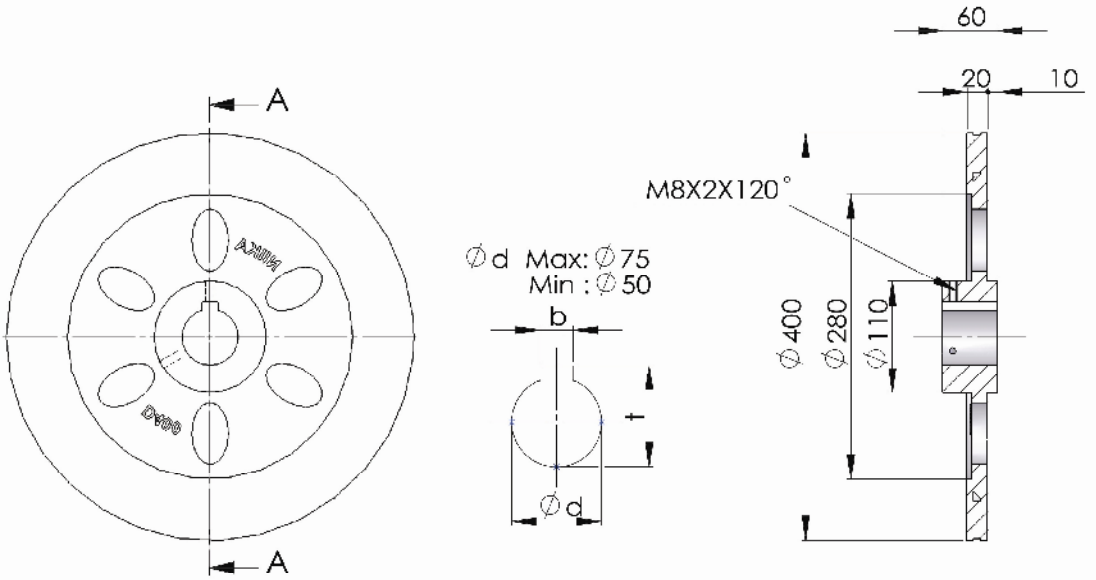


DISC-D230



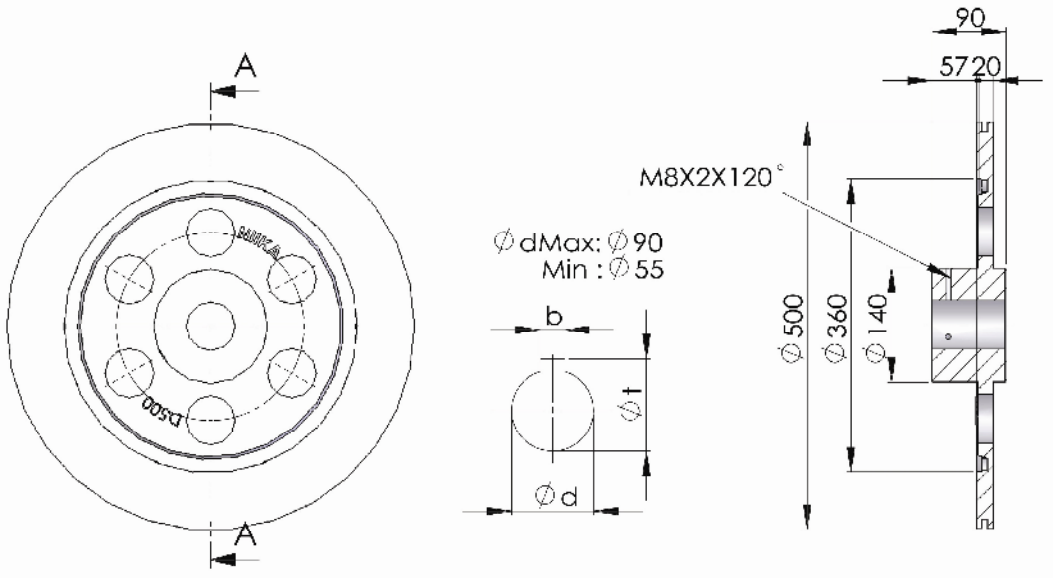
DISC-D400

Bore range from 50MM-75MM. Standard bore 70MM.



DISC-D500

Bore range from 50MM-75MM. Standard bore 70MM.



● Basic functions

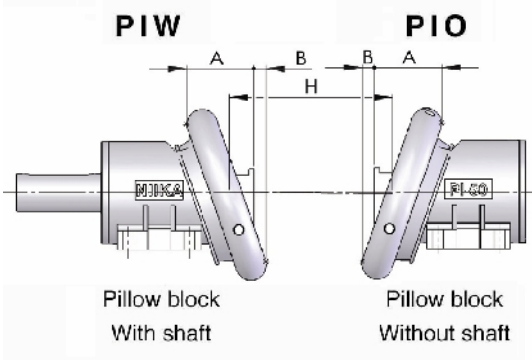
Safety Chuck is a quick coupling used in shafted center wind and center unwind applications and saves loading unloading time. Since driving mechanism (sprocket) does not need every time to be removed while changing core holding shaft, it gives maintenance free working. So far, Niika offer various size of Flange and Pillow (Pedestal) model safety chuck for our globe customers.

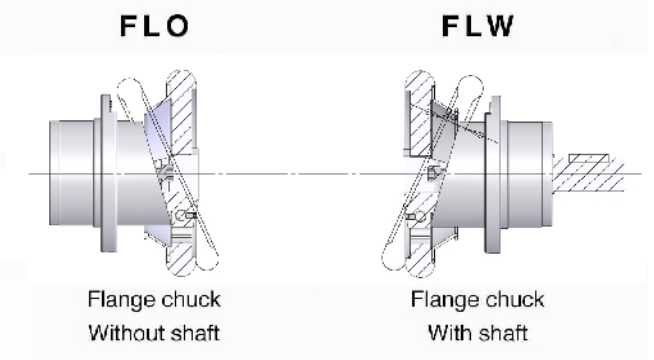
● FEATURE

Safety Chucks provide for quick change at the end of a production run (either winding or unwinding). Less down time during turn around, the more cost efficient is your operation. They provide a means of transmitting torque to the roll you are winding/unwinding. Torque in the form of a drive on the rewind end of the operation and torque from a brake on the unwind side

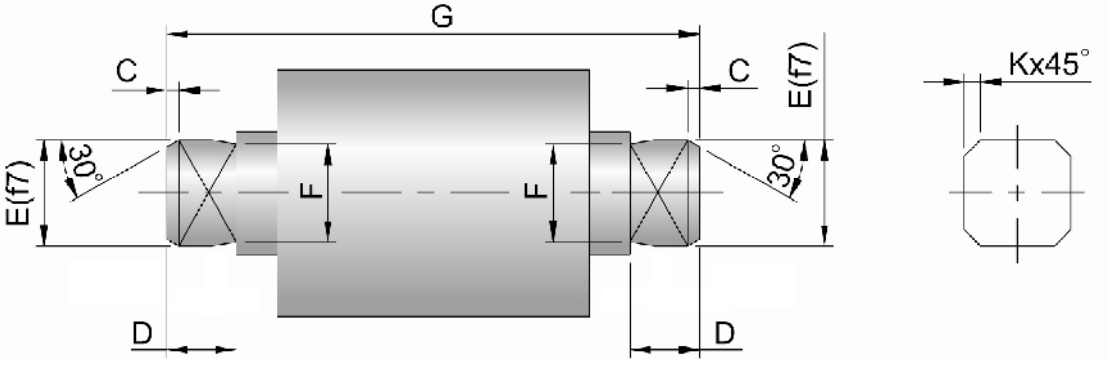
● Safety Chuck Type

PIO / PIW



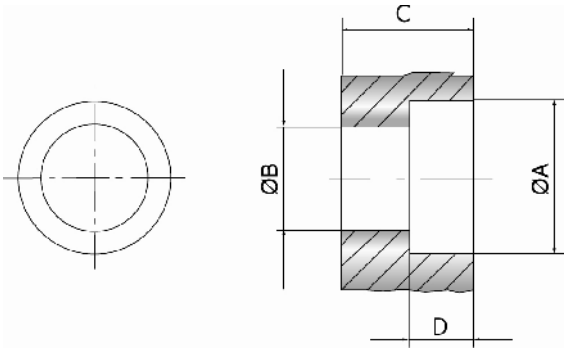


● Winding Shaft Tolerances



SIZE	A	B	C	D	E (f7)	E-F	H-G	K
Type 19	54	9	3	24	19-25	0.1	0.5	1
Type 28	61	8	4	28	25.30	0.15	0.5	1
Type 35	73	13	5	30	32.38.40	0.2	0.5	1.5
Type 50	81	13	5	32	40.45.50	0.3	0.5	2

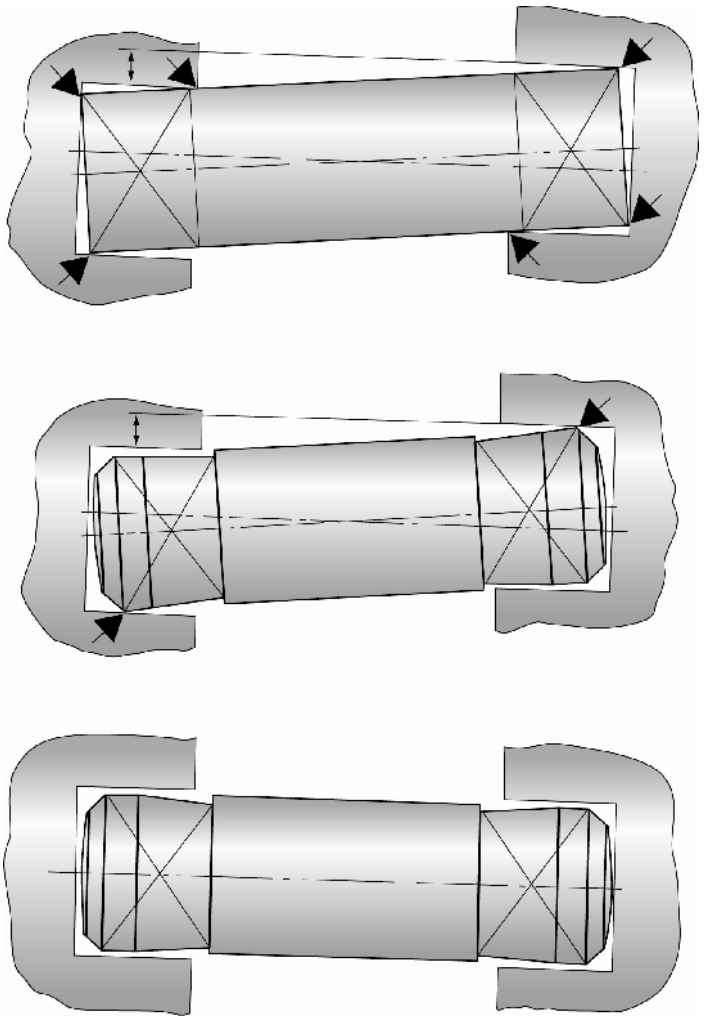
On customers request we are manufacturing the countersinks for flange mounted chucks as follows:



SIZE	φA	φB	C	D
FLO/W 19	15	9	12	5
FLO/W 28	18	11	15	7
FLO/W 35	20	13	16	8
FLO/W 50	26	18	22	10.5

● Assembly instruction

In order to protect your chucks against increased wear it is necessary to have a perfect alignment of the chucks. Any misalliance of the unit cuts down on the life of your shaft and safety chuck. The factory cannot provide any warranty if the chucks are not mounted as we recommend.

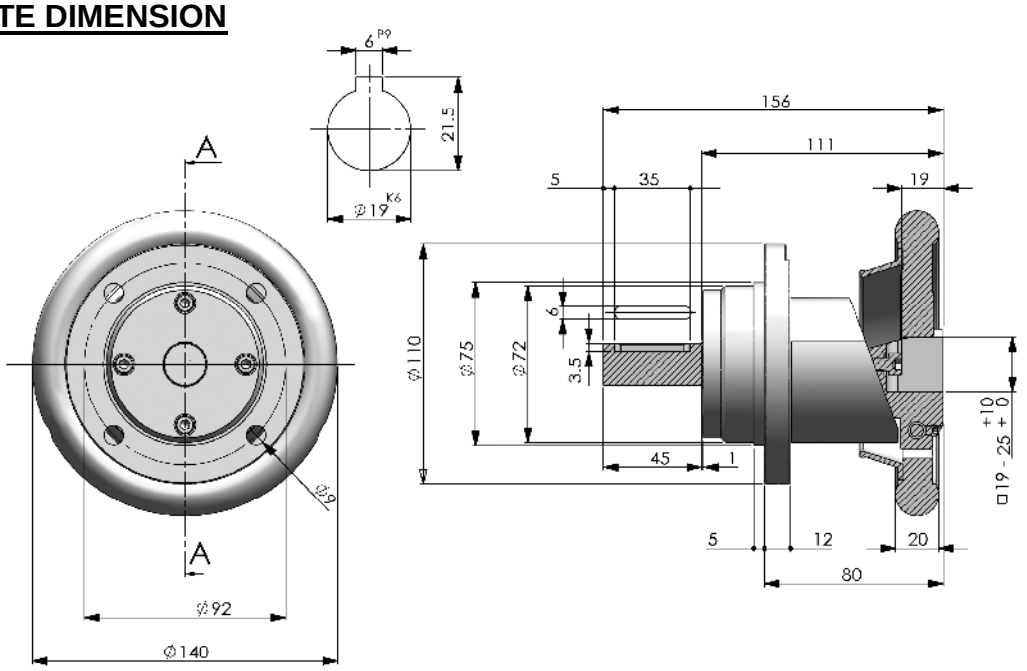


Size	PIO/W 19-FLO/W 19
Maximum load	300 KG
Maximum torque allowed	12 kg m
Standard square bar size	19-25 mm
Unit Weight	9 kg

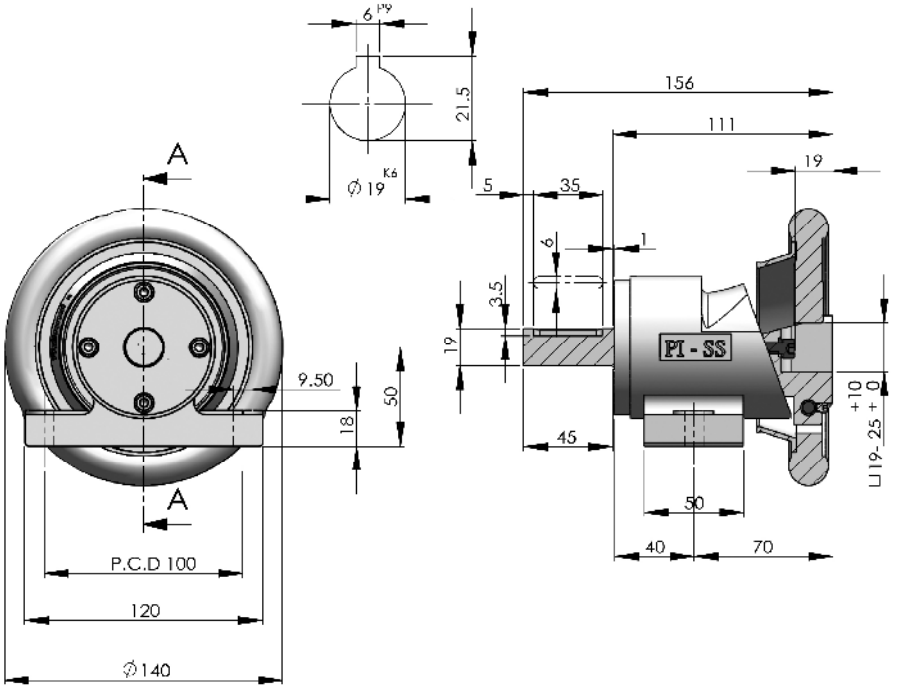
Our standard shaft diameter is Ø19 length 45 MM and can modify to meet your requirement

APPROXIMATE DIMENSION

FLO / FLW 19



PIO / PIW 19

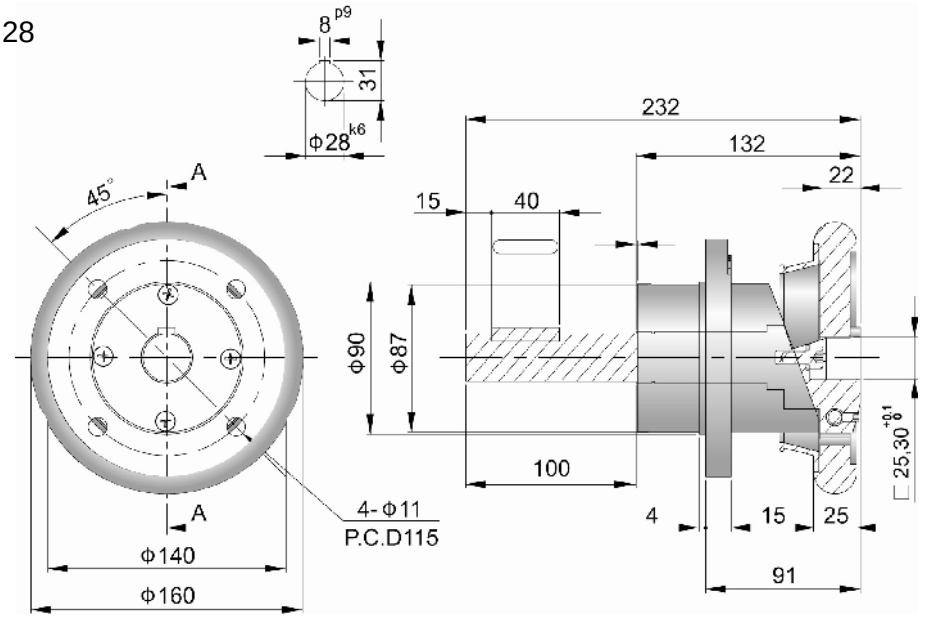


Size	PIO/W 28-FLO/W 28
Maximum load	800 KG
Maximum torque allowed	18 kg m
Standard square bar size	25 30 mm
Unit Weight	18 kg

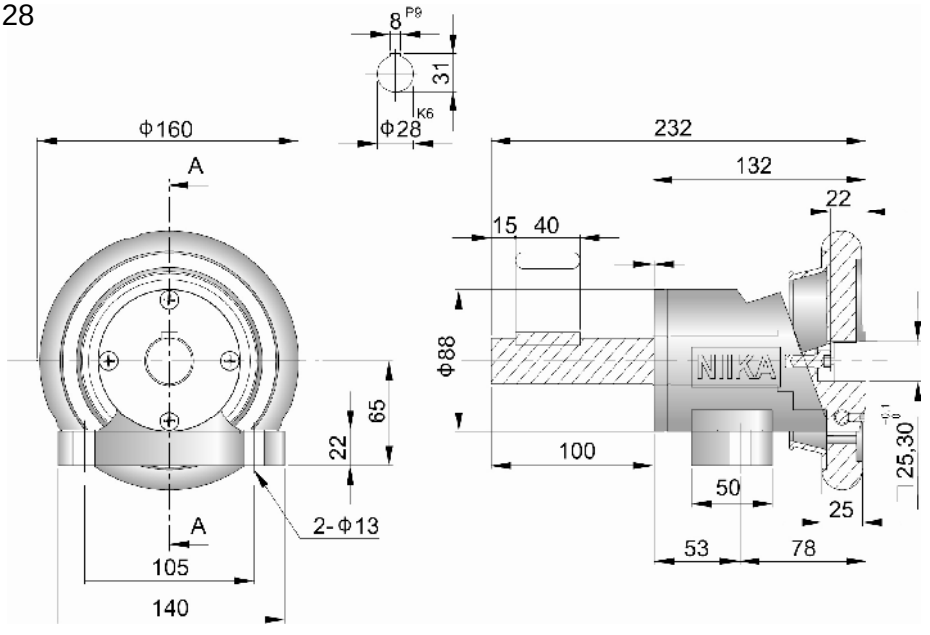
Our standard shaft diameter is Ø28 length 100 MM and can modify to meet your requirement

APPROXIMATE DIMENSION

FLO / FLW 28



PIO / PIW 28

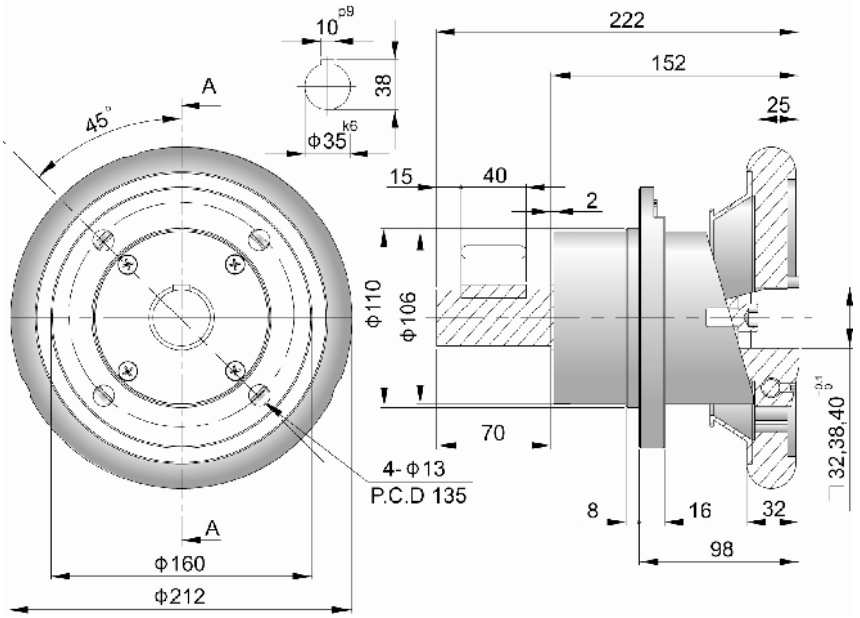


Size	PIO/W 35-FLO/W 35
Maximum load	1600 KG
Maximum torque allowed	35 kg m
Standard square bar size	32 38 40 mm
Unit Weight	27 kg

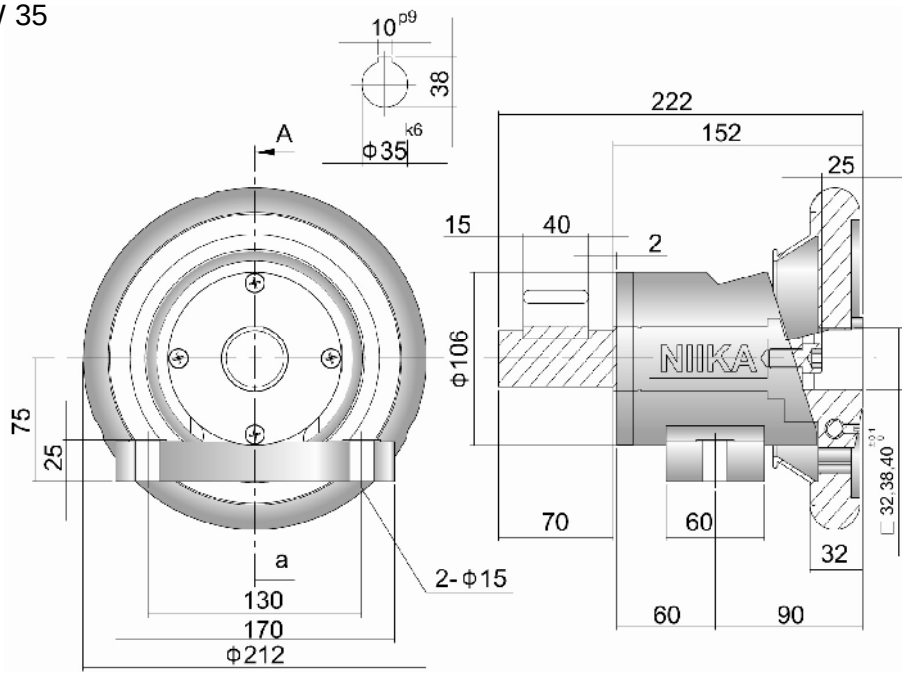
Our standard shaft diameter is Ø35 length 70 MM and can modify to meet your requirement

APPROXIMATE DIMENSION

FLO / FLW 35



PIO / PIW 35



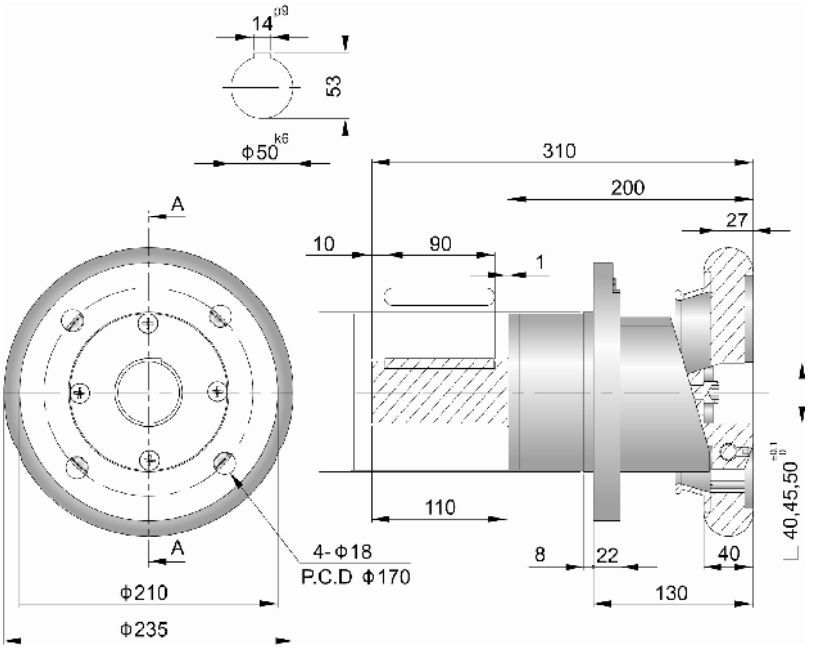
NIIKA Limited reserves the right to modify or change the design without prior notice.

Size	PIO/W 50-FLO/W 50
Maximum load	2800 KG
Maximum torque allowed	110 kg m
Standard square bar size	40 45 50 mm
Unit Weight	53 kg

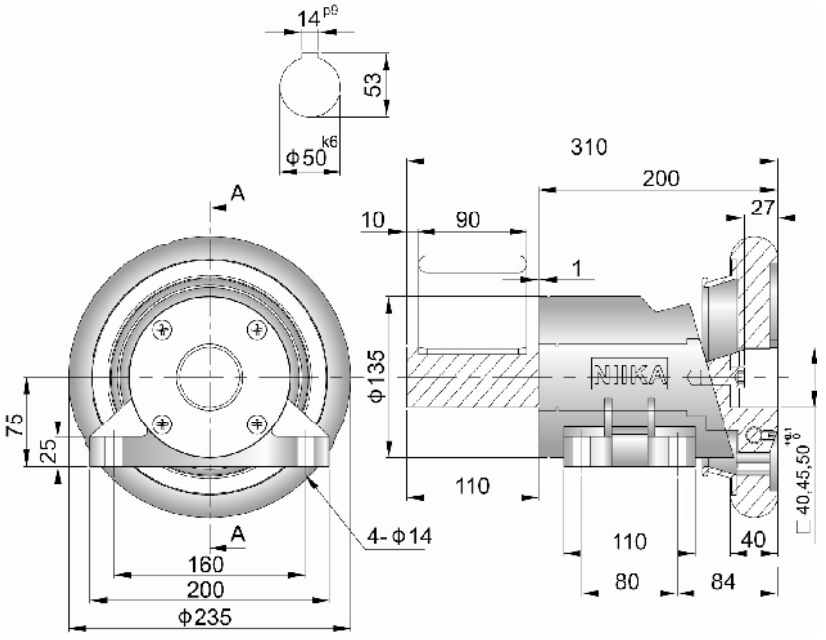
Our standard shaft diameter is Ø50 length 110 MM and can modify to meet your requirement

APPROXIMATE DIMENSION

FLO / FLW 50



PIO / PIW 50



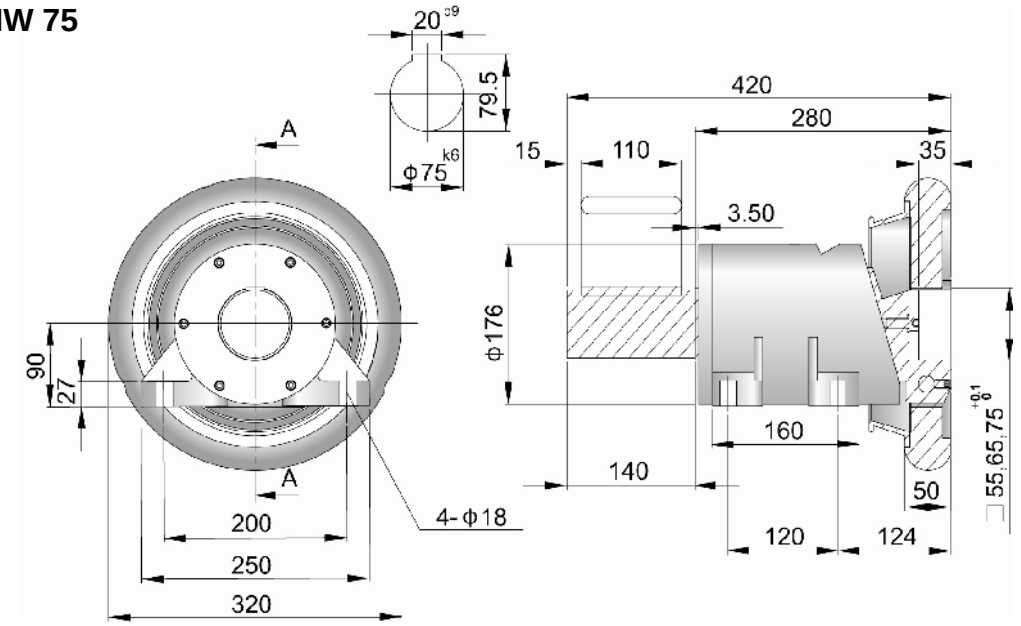
NIIKA Limited reserves the right to modify or change the design without prior notice.

Size	PIO/W 75
Maximum load	7000 KG
Maximum torque allowed	235 kg m
Standard square bar size	55 65 75 mm
Unit Weight	120 kg

Our standard shaft diameter is Ø75 length 140 MM and can modify to meet your requirement

DIMENSION

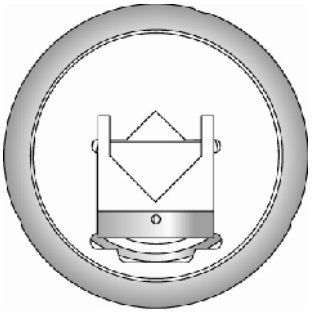
PIO / PIW 75



NIIKA Limited reserves the right to modify or change the design without prior notice.

NEW TYPE: 45 DEGREE ENTRY AVAILABLE

- HIGHT SPEED WITHOUT NOISY
- EASY LOADING OF SHAFT



Structure of airshaft and how to use it

Airshaft consists of basic combination of body and journal, and materials have to be chosen according to working specifications. Plates are inserted in a line in body and value of plate has to be equal to inner diameter of pipe. Lug is assembled in one-unified part with plate.
Lug is operated by air-in and air-out and clamped on core inner side according to contraction and inflation of rubber tube. Clamping power is being proportioned to air pressure.
Air-in and air-out are instantaneously done and lugs enter into shaft completely when air-out, then core can be exchanged very easily.

Each Niika shaft is customized to meet the exact needs of your processing requirements, and quality manufactured for long life, reduced maintenance and increased productivity. An aggressive quality assurance program ensures that close tolerances are held and that all specifications are met or exceeded. Niika's commitment to excellence is backed by our one-year guarantee in both material and workmanship.

The price of airshaft is depending on body length, please provide your drawing or fill the information on page 25 for quotation.

Your own drawing is most welcome.

LUG TYPE AIR SHAFT

Lug type airshafts are strong and versatile, delivering superior performance in the widest range of converting unwind and rewind applications. Also, eliminate core damage, prevent roll slippage during fast startups and shutdowns, and minimize vibration at high web speeds.
Designed for light- to heavy-duty applications with 1” (25mm) to 12"(300mm) ID cores, the Air Lug shaft is often used in center unwind and rewind applications with either paper or steel cores.

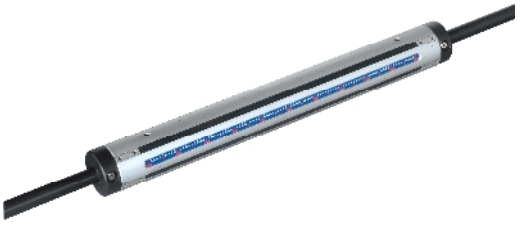
LEAF TYPE AIRSHAFT

Designed for a wide range of converting applications, this shafts are the best choice when using thin cores in your web process. If you want to minimize the deformation of core with air pressure, you are recommended to use Niika leaf type shaft.

With full-length external leaves, these shafts are particularly suited for delicate materials. Leaf Shafts are built tough, with bodies constructed of steel or aluminum, and internal tubes made of durable, hardwearing rubber.

This type of shaft should not be considered for use as a "differential type shaft" on slitters.

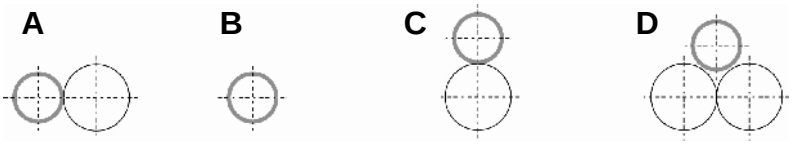
MULTI BLADDER AIRSHAFT

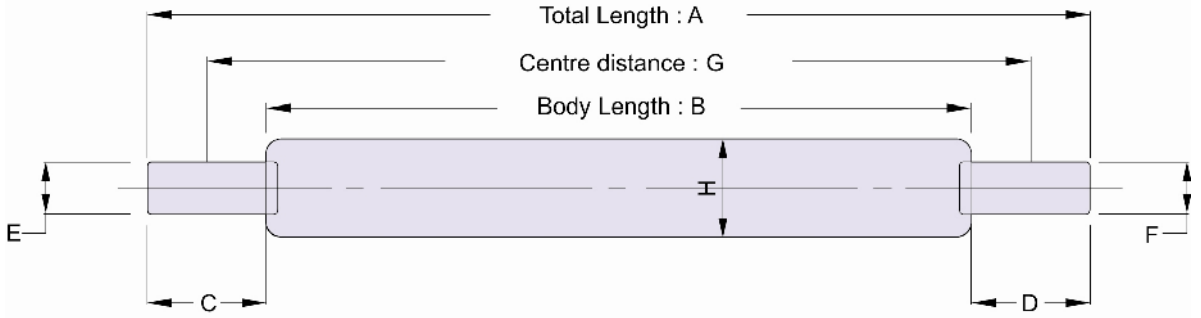


- Multiple external expansion elements to grip the inside diameter of any core material.
- Gripping elements are activated by simultaneously inflating bladders with a single air valve.
- While bladders rarely fail, the processes to replace external bladders are simple and quick.
- Hard rubber elements are standard; aluminum is available to suit various applications.
- Light weight of shaft easy to lift by operator

Quotation sheet for Air Shaft

CUSTOMER: DATE:
TEL: FAX:
CONTACT PERSON:
QUANTITY: COUNTRY:

TYPE OF SHAFT : LUG / LEAF / MULTI BLADDER	
AIRSHAFT OD H :	
PAPER CORE ID	
CORE MATERIAL	
TOTAL LENGTH A :	
BODY LENGTH B :	
LENGTH C :	
LENGTH D :	
DIAMETER E :	
DIAMETER F :	
CENTRE LENGTH G :	
MAX CORE LENGTH	
MAX WEIGHT	
MIN CORE LENGTH	
MIN WEIGHT	
UNWIND OR REWIND :	
LINE SPEED :	
MAX RPM	
SHAFT SUPPORTED 	
DYMANIC BALANCE	
SHAFT JOURNAL HEAT TREATMENT	

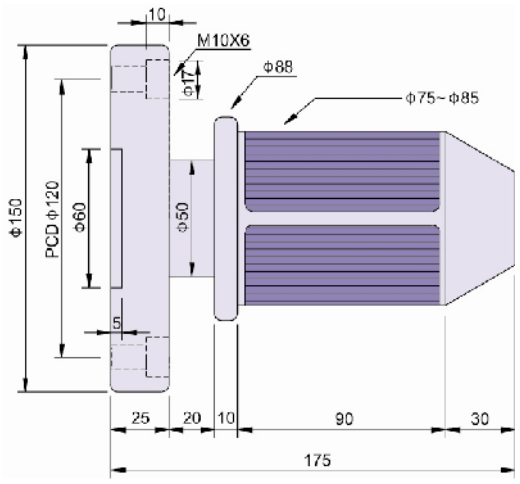


FAX to Niika: 886 2 8972 6270 or E-mail: niika.n2@msa.hinet.net

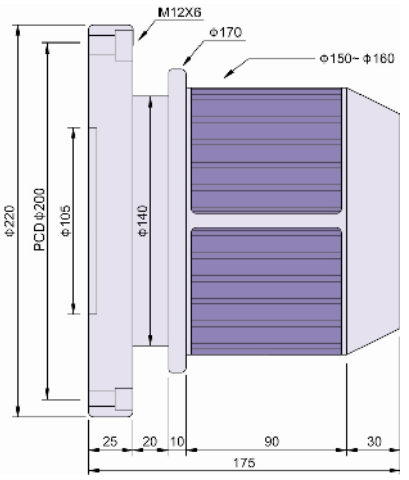
Spring type: The lugs expand when received the pressure from edge of paper core by machine moveable arms and lug automatic release after pressure free from the edge of paper core when machine moveable arms opened. It is most recommend for on unwind roll stand with hydraulic arm facility.

BENEFITS
Handles high weight. Easy to maintain and core-friendly. Reducing downtime and the risk of injury due to heavy lifting

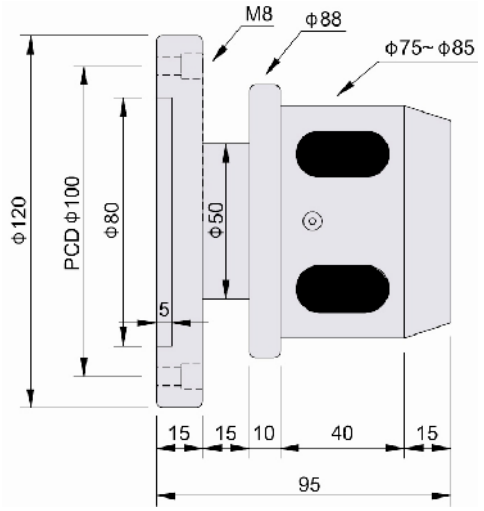
NEA001-3" (MAX LOAD 1.5 TONES/PC)



NEA002-6" (MAX LOAD 4 TONES/PC)



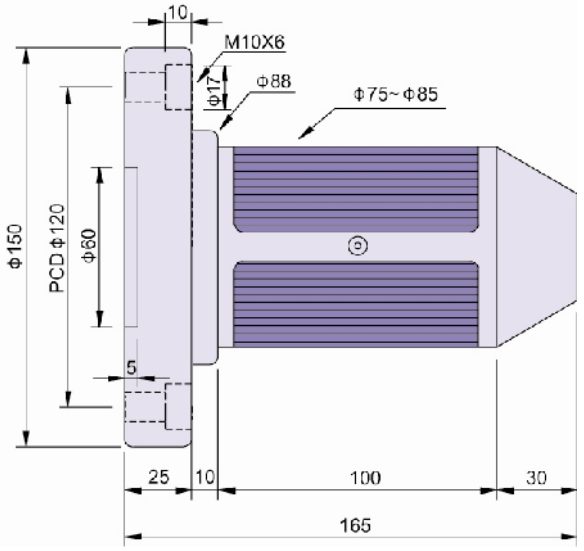
NEA004" (MAX LOAD 800 KGS/PC)



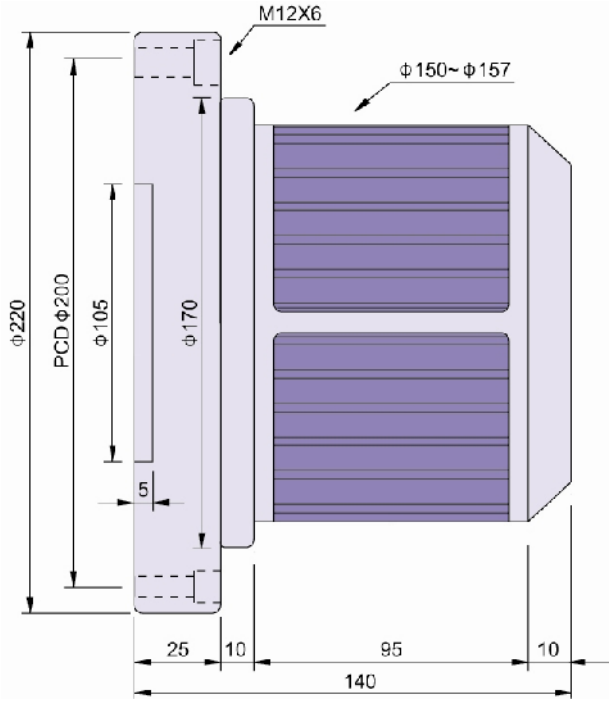
Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. Also, PCD and length change are welcome.

Rotary type: The expanding elements, pin-fitted on a cam, are expanded through the reel rotation combined with the web tension. It is most recommend for on unwind roll stand without hydraulic arm facility.

NEB 001-3" (MAX LOAD 1.2 TONES/ PC)



NEB 002-6" (MAX LOAD 4 TONES/PC)

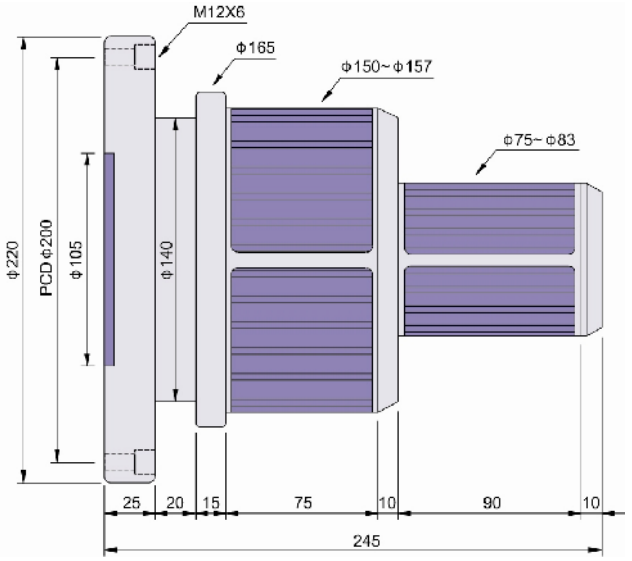


Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. Also, PCD and length change are welcome.

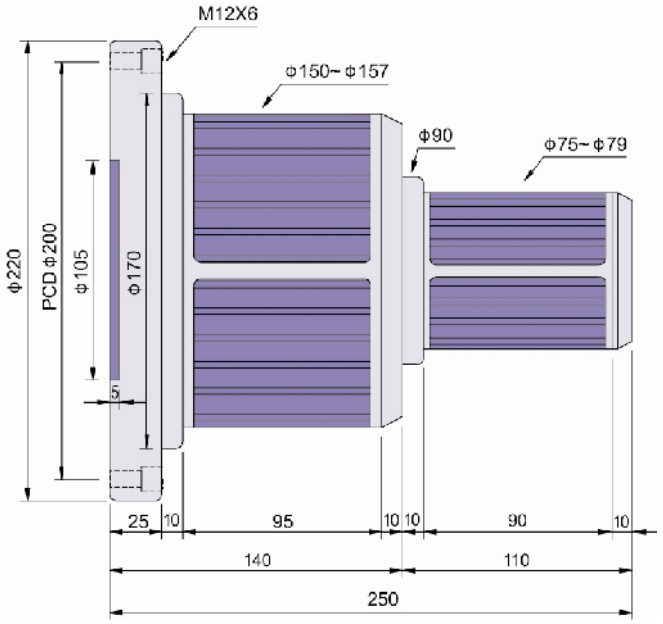
STEPPED MACHANICAL CHUCK NIKA®

Idea to save time and cost when uses different paper cores on shaft less applications in corrugating, sheeting, paper finishing or laminating. The unique design is extremely strong, easy to maintain and core-friendly. Not require removing the chuck from machine when use different sizes of paper cores, that means increase your productivity. Always customer made product.

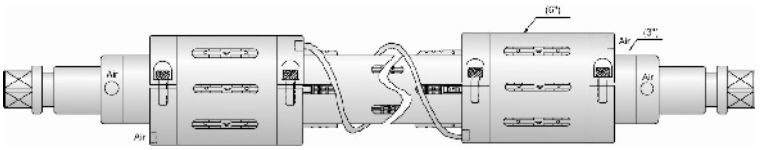
SPRING TYPE: NEA 003- 3 x 6" (MAX LOAD 3" 1.5 TONES/PC)
(MAX LOAD 6" 4 TONES/PC)



ROTARY TYPE: NEB 003-3 X 6" (MAX LOAD 3" 1.2 TONES/PC)
(MAX LOAD 6" 4 TONES/PC)

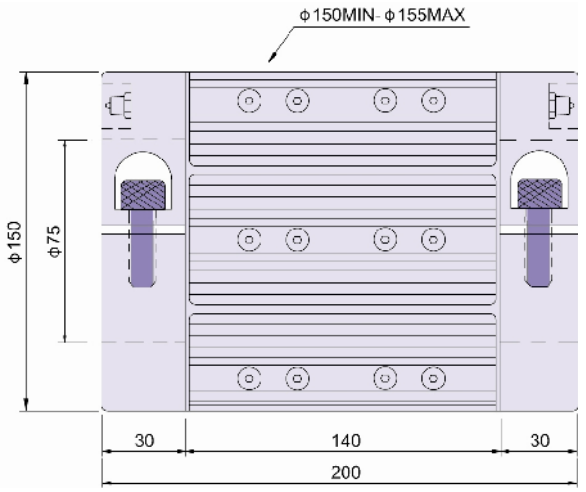


Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. Also, PCD and length change are welcome.

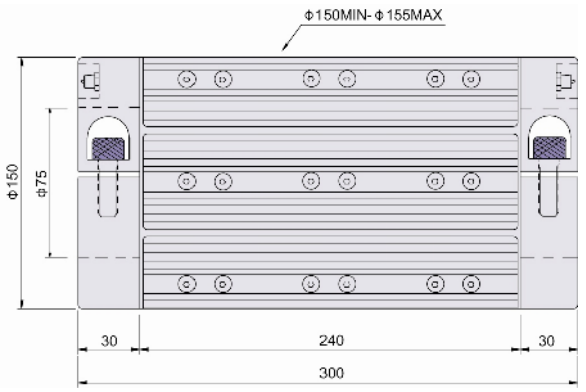


You can accommodate additional core diameters at a fraction of the cost by use pneumatic adapter. It is easier changeover and less downtime mean greater productivity at a very low cost. 5”, 6” and 12” adapter can apply to 3” main shaft. With installing adapters, only 3” shaft can cover 5”, 6” and 12” shaft.

LEAF TYPE
NEC001- 6”X 200



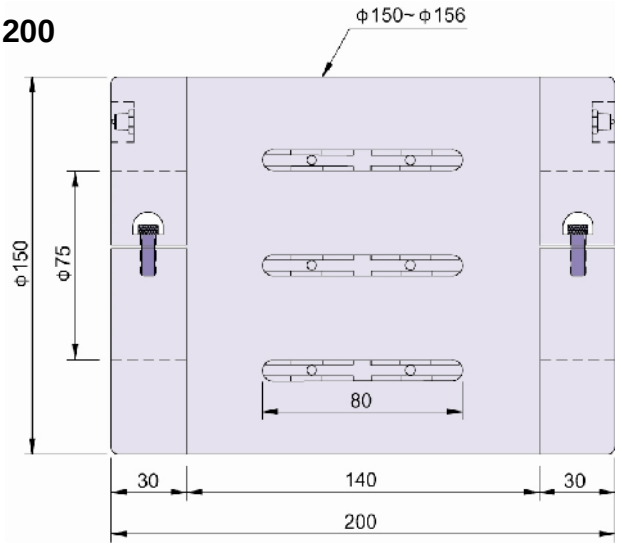
LEAF TYPE
NEC002- 6”X 300



Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. **Please indicate you support shaft OD when order (very important).**

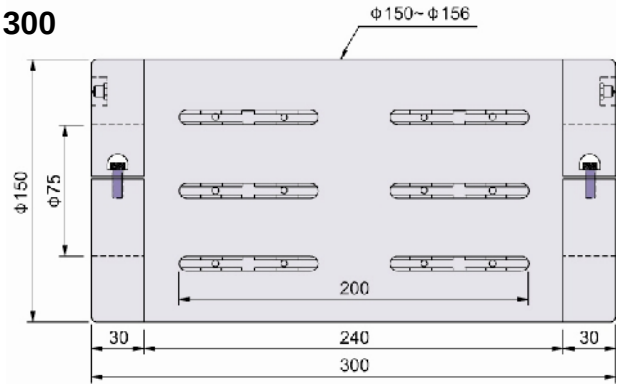
LUG TYPE

NED001- 6”X 200



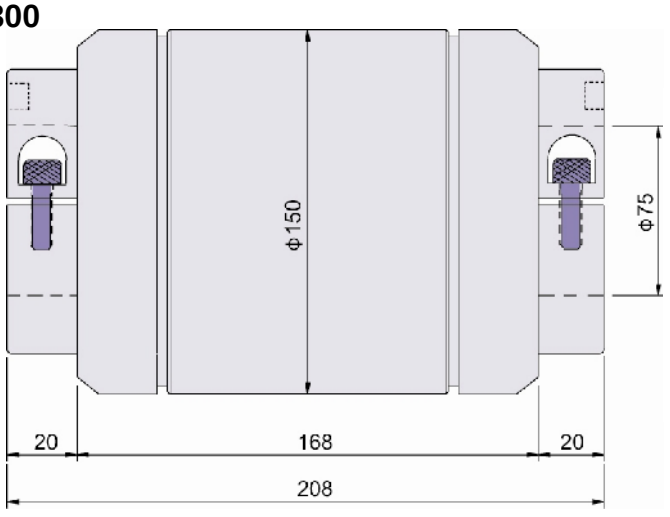
LUG TYPE

NED002- 6”X 300



RUBBER TYPE

NED003- 6”X 300

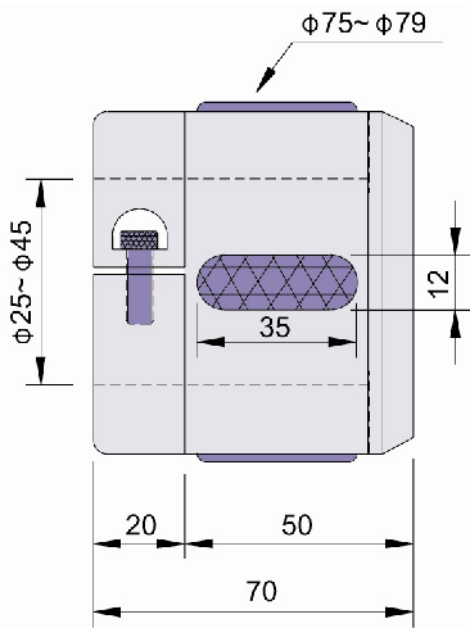


NED 003 is use on plastic core and steel core. Also the weight is 1/3 lighter then other adapters.

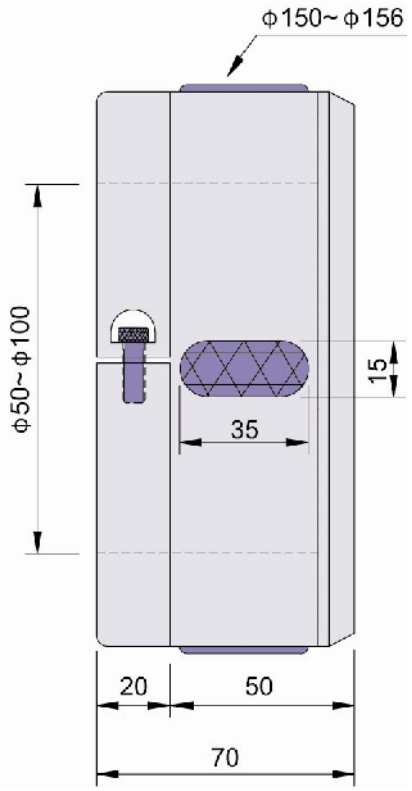
Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. **Please indicate you 3” shaft OD when order (very important).**

Please indicate bore size when order (very important).

NEF 001-3”



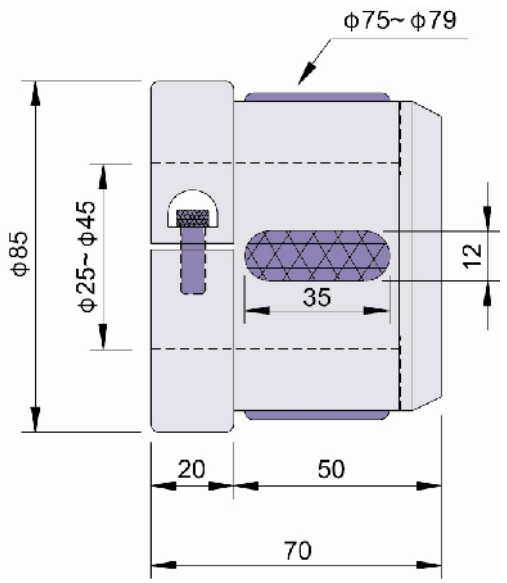
NEF 002-6”



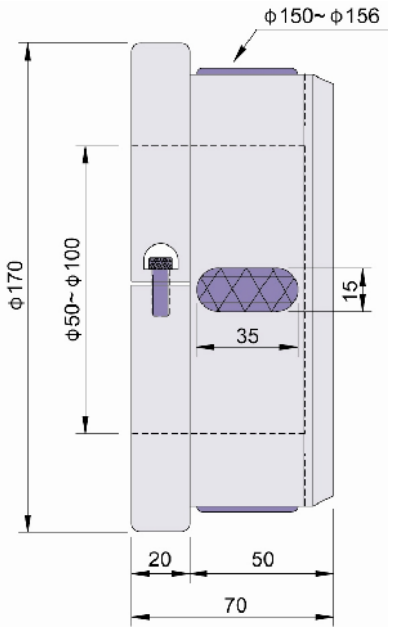
Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. Also, bore and length change are welcome.

Please indicate bore size when order (very important).

NEF 001F-3”

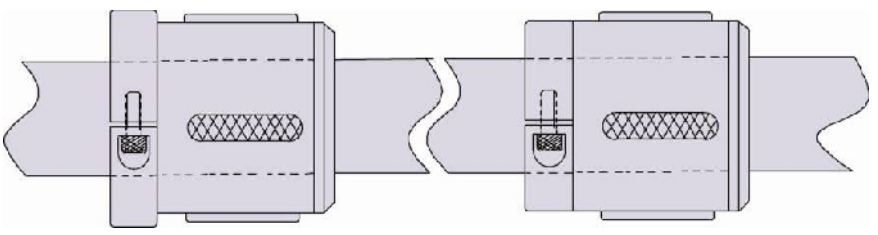


NEF 002F-6”



Standard sizes available for this Model are listed above, but are available in other sizes for a customer order. Also, bore and length change are welcome.

APPLICATION



AIR DIFFERENTIAL SHAFT

Niika air differential shafts slip internally to accommodate multiple width rolls on one shaft. Always custom-made, the shafts expand for a precision fit and are available in several designs and mounting styles. You can run multiple rolls on one run and still get the tension equalization that you need for a good quality output. Bottom line is, you can increase your productivity by running varying roll sizes at one time. The easiest way to try your success with a differential shaft is to use the most affordable NIIKA air roll differential shaft, which is designed for duplex center or surface winders, whether they have variable speed control or not. It is quick and easy to set up, is easy on the cores and won't let you down when you need multiple roll tension equalization.

NEGA-1
Bearing type for
normal paper core

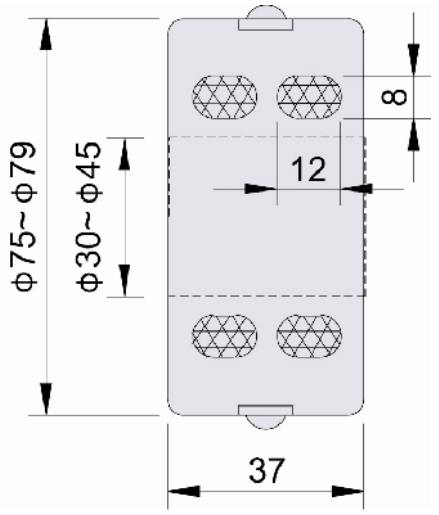
NEGA-2
Bearing type for
smooth core (plastic, steel)

Standard sizes available for NEGA-1 width 50 mm. NEGA-2 width 50MM but also available in other sizes for a customer order.

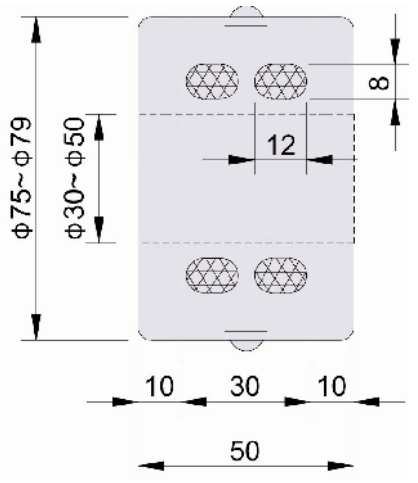
Rotating material of sleeve bore core and frictional material for two sides all adopt Bakelite. The frictional strength is subject to either spring pressure or cylinder power to decide each torque assembly of slippage, for easy to control the tension adjustment in each material.

1. Sizes of inside diameter can make by suitable shaft.
2. Other lengths are available on request.

NEG 001- 37 MM



NEG 002-50MM



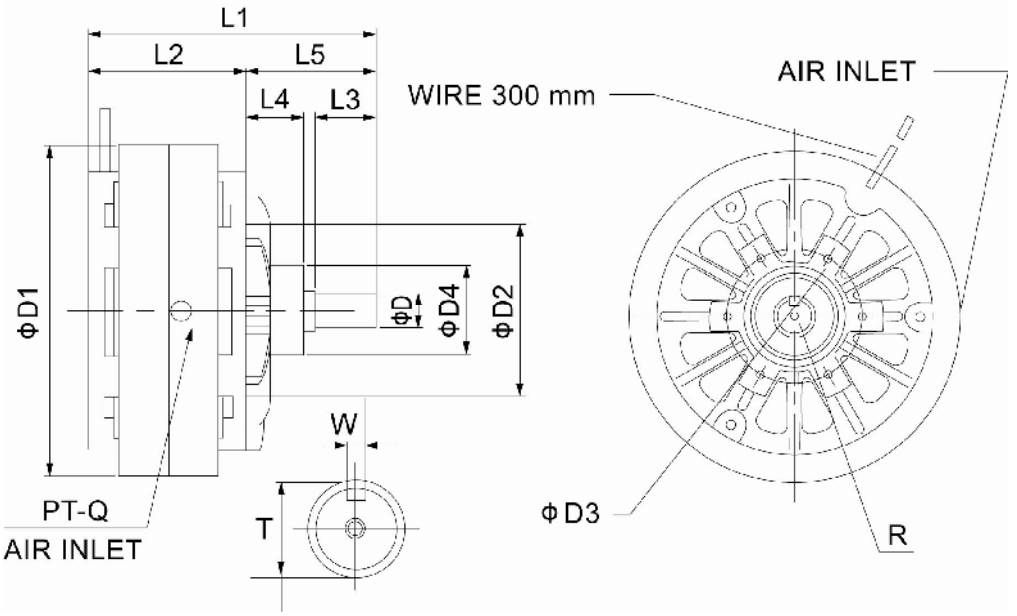
Standard sizes available for this Model are as NEG001-37 MM and NEG002-50 MM listed above, but is available in other sizes for a custom order.

APPLICATION:

Specification

Type	Fix torque kgfm(Nm)	Capability (75°C)			Inertial torque (kgm^2)	Compelling air-cooling concessional slide rate of work			Weight (kg)	Max. speed of Rotation (r/min)	Weight of Magnetic Powder (g)
		Electric (A)	Electric Power (W)	(S)		Air pressure (pa)	Air volume (m3/min)	Ratio (W)			
POB-006	0.6(6)	0.81	19.4	0.09	$6.10*0^{-5}$	$1.8*10^{4}$	0.1	170	5.2	1800	10
POB-012	1.2(12)	0.94	22.5	0.10	$1.34*10^{-3}$	$3*10^{4}$	0.2	250	5.2	1,800	20
POB-025	2.5(25)	1.24	30	0.12	$3.80*10^{-3}$	$5*10^{4}$	0.4	380	9	1,800	33
POB-050	5(50)	2.15	51.5	0.13	$9.50*10^{-3}$	$1*10^{5}$	0.6	700	15.5	1,800	60
POB-100	10(100)	2.40	57.6	0.25	$3.50*10^{-2}$	$6*10^{4}$	1.1	1,100	34	1,800	140
POB-200	20(200)	2.70	64.8	0.12	$9.15*10^{-2}$	$5*10^{4}$	1.6	1,900	53	1,800	225
POB-400	40(400)	5	120	0.40	$2.43*10^{-1}$	$1.6*10^{5}$	2.0	2,100	102	1,800	300

Size of appearance (mm)



Specification

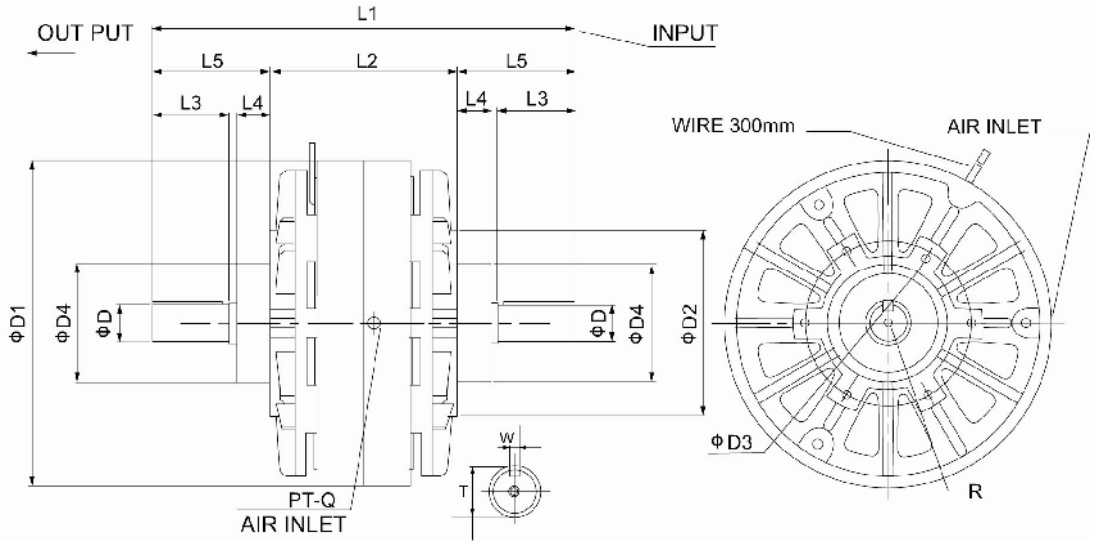
Type	L1	L2	L3	L4	L5	D1	D2	D3	D4(G7)	Q	R		Axis body		
											Pathway	Depth	D(h7)	W(p7)	T(0-0.2)
POB-006	114	57	26	14	46	134	***	64	42	1/8	M4	10	12	4	13.5
POB-012	132	83	29	15	49	152	126	64	42	1/8	M4	8	15	5	17
POB-025	155	91	43	17	64	184	160	78	55	1/8	M5	10	20	5	22
POB-050	193	102	55	30	91	219	196	100	74	1/4	M6	12	25	7	28
POB-100	239	139	65	28	100	278	160	140	100	3/8	M10	20	30	7	33
POB-200	278	169	69	30	109	327	174	150	110	3/8	M10	20	35	10	38.5
POB-400	339	200	92	35	139	398	230	200	130	3/8	M10	20	45	12	48.5

We reserve the right of changing specification or size to our products

Specification

Type	Fix torque kgfm(Nm)	Capability (75°C)			Inertial torque (kgm^2)		Compelling air-cooling concessional slide rate of work			Weight (kg)	Max. speed of Rotation (r/min)	Weight of Magnetic Powder (g)
		Electric (A)	Electric Power (W)	(S)	INPUT	OUTPUT	Air pressure (pa)	Air volume (m3/min)	Ratio (W)			
POC-006	0.6（6）	0.81	19.4	0.09	$6.00*10^{-4}$	$1.93*10^{-4}$	$1.8*10^{4}$	0.1	170	5.2	1800	10
POC-012	1.2(12)	0.94	22.5	0.10	$1.34*10^{-3}$	$4.90*10^{-4}$	$3*10^{4}$	0.2	250	6	1,800	20
POC-025	2.5(25)	1.24	30	0.12	$3.80*10^{-3}$	$1.49*10^{-3}$	$5*10^{4}$	0.4	380	11	1,800	33
POC-050	5(50)	2.15	51.5	0.13	$9.50*10^{-3}$	$4.80*10^{-3}$	$1*10^{5}$	0.6	700	18.5	1,800	60
POC-100	10(100)	2.40	57.6	0.25	$3.50*10^{-2}$	$2.50*10^{-2}$	$6*10^{4}$	1.1	1,100	37	1,800	140
POC-200	20(200)	2.70	64.8	0.37	$9.15*10^{-2}$	$6.89*10^{-2}$	$5*10^{4}$	1.6	1,900	59	1,800	225
POC-400	40(400)	5	120	0.40	$2.43*10^{-1}$	$1.50*10^{-1}$	$1.6*10^{5}$	2.0	2,100	110	1,800	300

Size of appearance (mm)



Specification

Type	L1	L2	L3	L4	L5	D1	D2	D3	D4(G7)	Q	R		Axis body		
											Pathway	Depth	D(h7)	W(p7)	T(0-0.2)
POC-006	164	72	26	14	46	134	***	64	42	1/8	M4	10	12	4	13.5
POC-012	192	94	29	15	49	152	126	64	42	1/8	M4	8	15	5	17
POC-025	230	102	43	17	64	184	160	78	55	1/8	M5	10	20	5	22
POC-050	294	112	55	30	91	219	196	100	74	1/4	M6	12	25	7	28
POC-100	360	160	65	28	100	278	160	140	100	3/8	M10	20	30	7	33
POC-200	408	190	69	30	109	327	174	150	110	3/8	M10	20	35	10	38.5
POC-400	500	221	92	35	139	398	230	200	130	3/8	M10	20	45	12	48.5

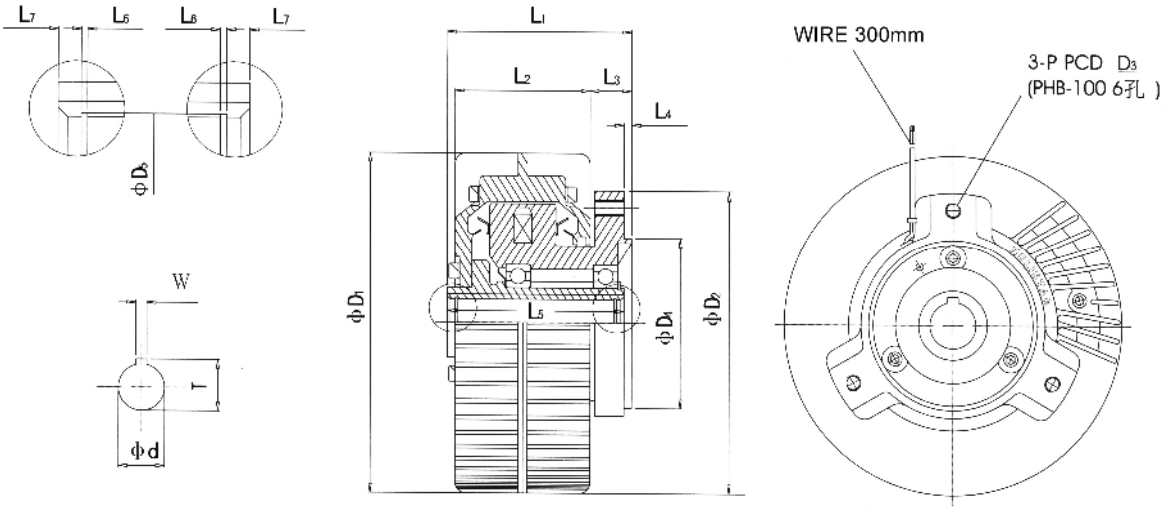
We reserve the right of changing specification or size to our products

Hollow spindle magnetic powder brake

Specification

Type	Fix torque kgfm (Nm)	Capability (75°C)			Inertial torque (kgm^2)	Weight (kg)	Max. speed of Rotation (r/min)	Weight of Magnetic Powder (g)
		Electric (A)	Electric Power (W)	(S)				
PHB-050	5(50)	0.94	22.6	0.17	$2.3*10^{-2}$	11	1,800	60
PHB-100	10(100)	1.21	28.8	0.30	$9.75*10^{-2}$	21.5	1,800	117

Size of appearance (mm)

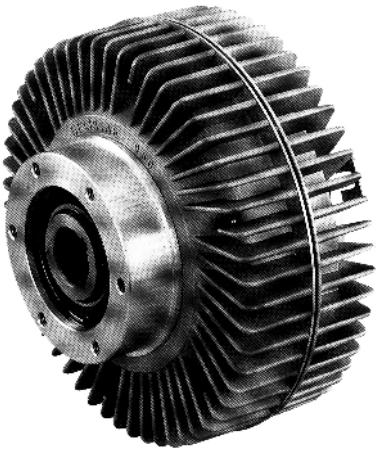


Specification

Type	L1	L2	L3	L4	L5	L6	L7	D1	D2	D3	D4 (G7)	D5	P		Axis body		
													Pathway	Depth	d(h7)	W(p7)	T(0-0.2)
PHB-050	120	88	27	5	115	1.3	5	220	172	150	110	31.4	M10	19	30	7	33
PHB-100	140	106	29	5	130	1.65	5	275	190	150	110	37	M10	22	35	10	38.5

We reserve the right of changing specification or size to our products

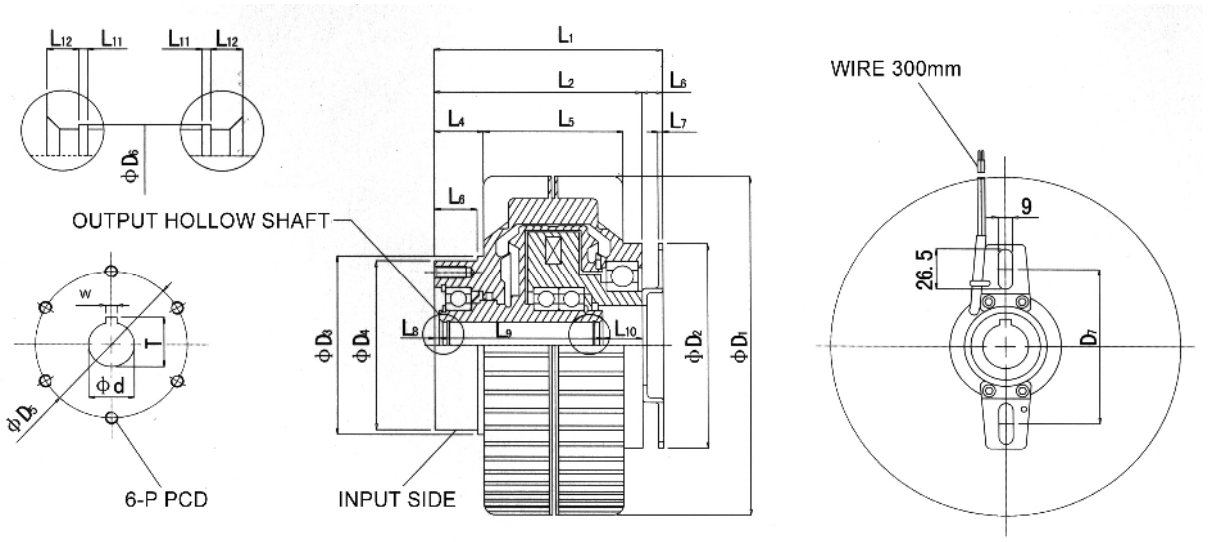
Hollow spindle magnetic powder clutch



Specification

Type	Fix torque kgfm (Nm)	Capability (75°C)			Inertial torque (kgm^2)		Weight (kg)	Max. speed of Rotation (r/min)	Weight of Magnetic Powder (g)
		Electric (A)	Electric Power (W)	(S)					
PHC-050	5(50)	1.4	33.6	0.09	$2.6*10^{-2}$	$5.8*10^{-3}$	11	1,800	60
PHC-100	10(100)	2.0	48	0.14	$7.25*10^{-2}$	$1.6*10^{-2}$	19	1,800	117

Size of appearance (mm)

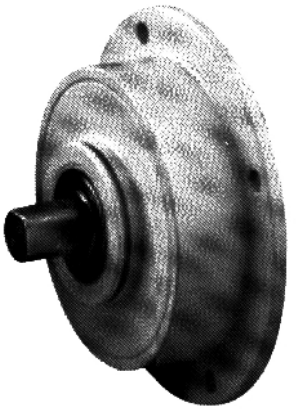


Specification

Type	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	D1	D2	D3	D4 (G7)	D5	D6	D7	P		Axis body		
																				Pathway	Depth	D (h7)	W (p7)	T (0-0.2)
PHC-050	144	131	10	31	88	20	3	3	103	25	1.3	5	220	121	115	110	95	31.4	100.5	M8	20	30	7	33
PHC-100	171	158	10	40	106	30	3	4	112	42	1.65	5	275	142	130	125	100	37	108.5	M10	25	35	10	38.5

We reserve the right of changing specification or size to our products

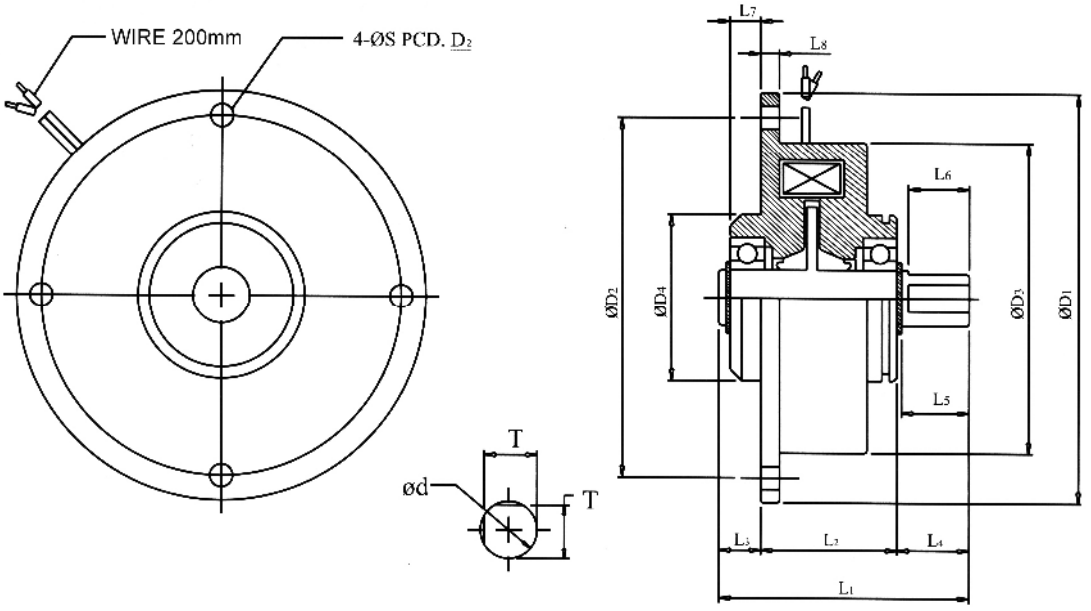
Mini-type magnetic powder brake



Specification

Type	Fix torque kgfcm (Nm)	Capability (75°C)			Inertial torque (kgm^2)	Weight (kg)	Max. speed of Rotation (r/min)
		Electric (A)	Electric Power (W)	(S)			
POB-0.05	0.5(5)	0.35	8.4	0.02	$9.4*10^{-3}$	0.4	1,800
POB-0.2	2(20)	0.39	9.5	0.034	$5.58*10^{-3}$	1	1,800
POB-0.5	5(50)	0.6	14.4	0.045	$1.25*10^{-3}$	1.3	1,800

Size of appearance (mm)

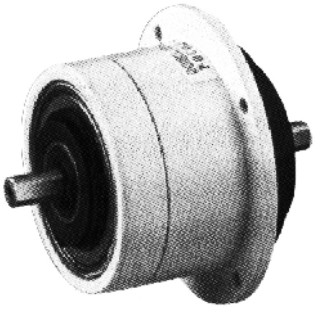


Specification

Type	L1	L2	L3	L4	L5	L6	L7	L8	D1	D2	D3	D4 (G7)	S	D (G7)	T
POB-0.05	56	27.5	5	23.3	22.3	12	2.5 *	3	65	56	43	46	4.5	6	5.5
POB-0.2	71.5	34	*	32	31	20	3 *	4	92	82	69	69	4.5	10	9
POB-0.5	66	36	11	19	18	16	8	5	108	95	82	44	6	15	14

We reserve the right of changing specification or size to our products

Mini-type magnetic powder clutch

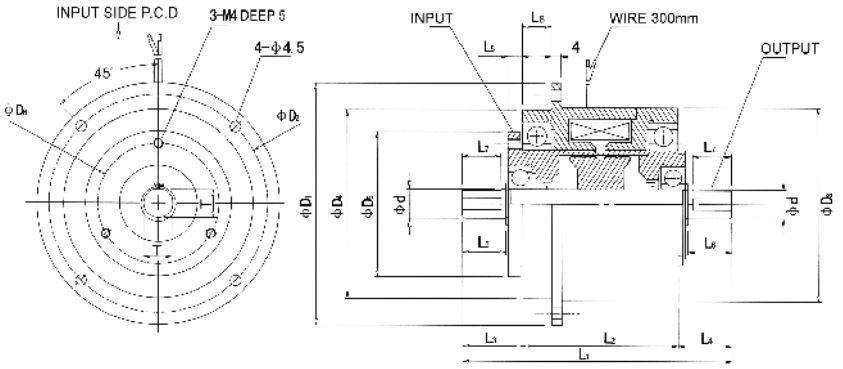


Specification

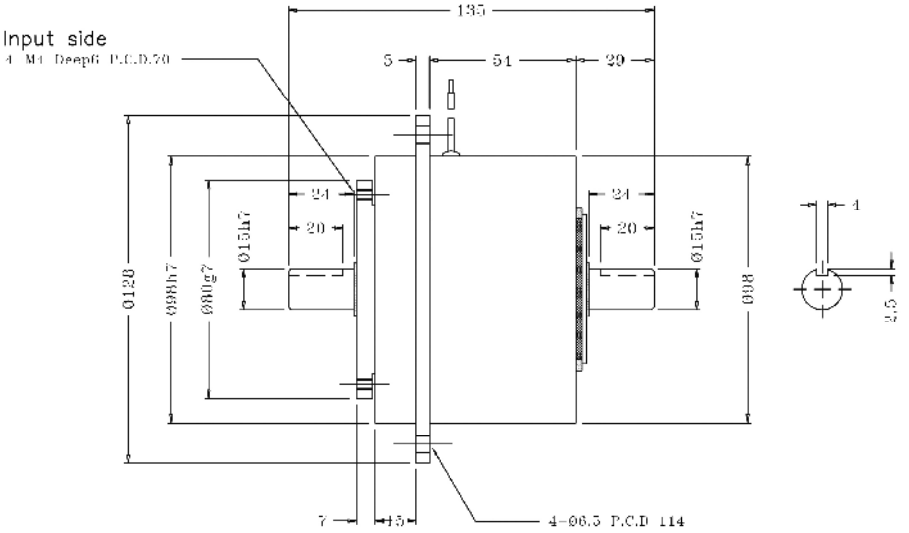
Type	Fix torque kgfcm (Nm)	Capability (75°C)			Inertial torque (kgm^2)		Weight (kg)	Max. speed of Rotation (r/min)
		Electric (A)	Electric Power (W)	(S)	INPUT	OUTPUT		
POC-0.2	2(20)	0.55	13	0.055	$6.80*10^{-1}$	$1.03*10^{-1}$	1.27	1,800
POC-0.5	5(50)	0.8	19	0.055	1.83	$4.0*10^{-1}$	2.3	1,800
POC-010	10(100)	1.0	24	0.09	5.3	1.1	4.1	1,800

Size of appearance (mm)

POC-0.2-0.5



POC-010



Specification

Type	L1	L2	L3	L4	L5	L6	L7	L8	D1	D2	D3	D4 (h7)	D5 (g7)	D6	D7	d (g6)	T
POC-0.2	95	53	22.5	19.5	6.5	15	13	9.5	85	75	65	63	48	40	16	9	8.5
POC-0.5	111	64	25	22	6	18	16	12	100	90	80	78	60	50	20	12	11.5

We reserve the right of changing specification or size to our products

TC-608P Principles

Tension Controller – Feedback SystemTC-608P Control Panel

NIIKA®

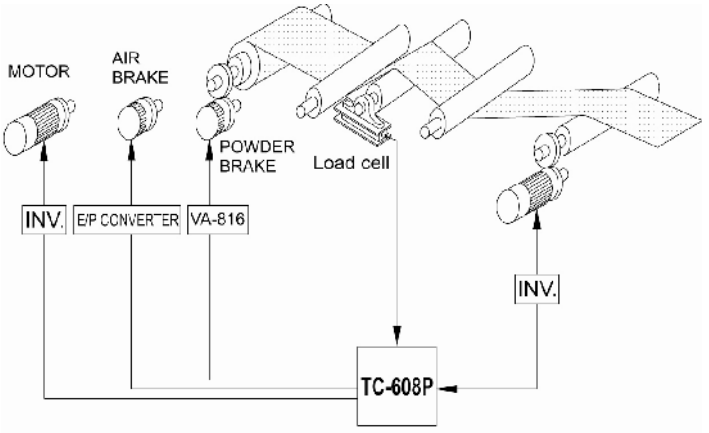
The controller sets the material put-in and roll-up and the tension value required according to the actual production conditions. 608H adjusts the output command after comparing the settings with the value detected and returned by the Load Cell in order to change the braking force or the roll-up torque, automatically setting the actual tension to the preset tension, a high-precision tension control system.

Features:

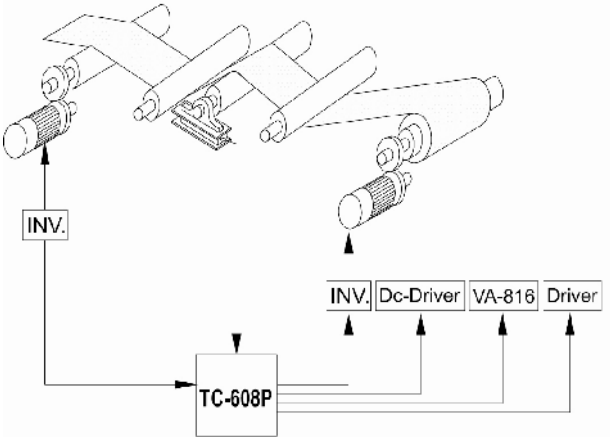
- high precision, high reliability
- tension value may be set at: kg / N / LB by the user
- digital design, unchanged characteristic
- humanistic design, easy to operate
- may be directly connected to LOAD CELL for input; Digitized zeroing and rate adjustment features for ease of operation.
- output command multi-functional display including preset and actual tension values
- possess the features of accelerating and decelerating master speed and augmentative delayed time output
- parameter power outage memory function
- able to initiate augmentative function, able to compensate static friction arising from initiating machine
- tension reduction function at shutdown eliminates excessive tension

Working Diagram

● **Put-in**



● **Roll-up**

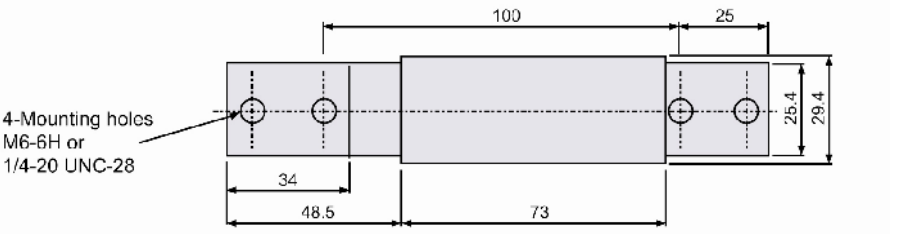


POWER SUPPLY	AC 220V ± 10% 50/60 HZ
COMSUMPTION	15 W MAX.
ANALOG TENSION INPUT	AD 14 BIT
MAIN SPEED INPUT	AD 8 BIT
CONTROL TERMINAL OUTPUT	DA 12 BIT
ALRAM OUT PUT	RELAY, 250 VAC, 1A
OPERATING TEMPERATURE	0-60 CELSIUS
STORAGE TEMPERATURE	-20-70 CELSIUS
HUMIDIFY	0-95% RH
WEIGHT	1 KGS

GRADE	E	F	G**	C3***	UNITS
Rated Capacities	5, 7, 10, 15, 20, 30, 50, 75, 100.				kg
Rated Output	2.0±10%				mv/v
Total Error*	0.030	0.020	0.0200	0.0200	±% of Applied Load
Zero Return after 30 mins	0.050	0.025	0.0170	0.0170	±% of Applied Load
Temperature Effect : On Output	0.0030	0.0014	0.0010	0.0010	±% of Applied Load /℃
: On Zero	0.0100	0.0060	0.0040	0.0023	±% of Rated Load Output /℃
Eccentric Loading	0.0074	0.0074	0.0049	0.0049	±% of Applied Load/cm
Zero Balance	10.0				±% of Rated Output
Temperature range : Operating **: Compensated**	-30 to ＋ 70 -10 to ＋ 40				℃ ℃
Safe Overload	150				% of Rated Capacity
Ultimate Overload	300				% of Rated Capacity
Excitation : Recommended **: Maximum**	10 15				Volts AC or DC Volts AC or DC
Input Impedance	415±15				Ohms
Output Impedance	350±3				Ohms
Insulation Impedance	1040:＞5000				MegaOhms
Deflection of Rated Capacity	＜0.4				mm
Weight :	1040 : 0.35				kg
Construction	1040 : Anodised aluminum				
Environmental Protection	1040 : IP54 (IP67 Optional)				
Cable	1 Meter Standard (0.5m 1041), 6 Wire, PVC, Single Floating Screen				

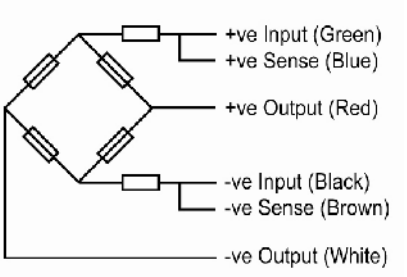
*Total Error – According to OIML R60 *85% utilization. ***Consult factory for utilization factors.

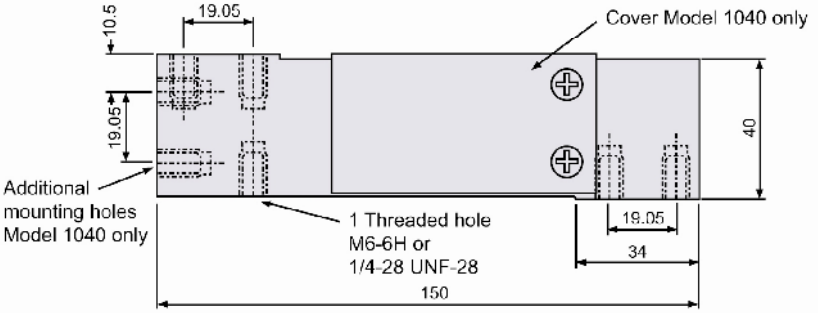
Outline Dimensions All Capacities in mm



Wiring Schematic Diagram

(1040 balanced bridge configuration)





VA-816

Powder brake / clutch driver VA-816 Controller

NIKA®

Features:

The controller of Magnetic Powder Brake/Clutch applies stable electricity to the magnetic coil in Brake/Clutch. When electricity passes through the magnetic coil, it will engender magnetic force to gather magnetic powder for transmitting torque. Under continual movement, torque will be transmitted accordingly. By controlling the flow of electric current, Brake/Clutch is controlled accurately to move or to stop the rolling process, in order to get the required tension control.

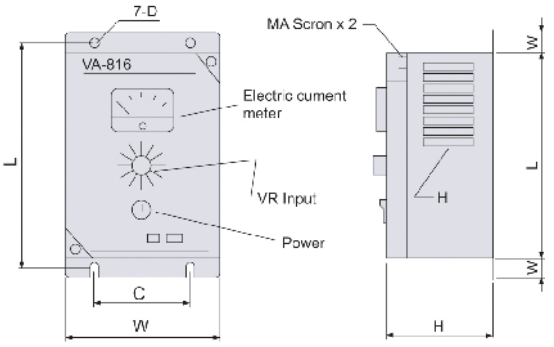
The design of Controller VA 816 series is based on direct ratio relationship between electricity and magnetic field. Furthermore, we have improved the treatment of temperature and sensitivity, after the adjustment of electrical circuit, Magnetic Brake/Clutch can get excellent performance of torque control and output.

Features:

- Output range: 1.3A~6A, full style.
- Auto feedback modification.
- Precision, lower zero-draft, stability output.
- High anti-interference casing.
- Compatible with various powder clutch or brake.

Dimension / unit: mm

MODEL	L	W	H	C
VA 816-1300	200	138	95	65
VA816-3000/4500/6000	250	145	130	80



Ordering Code

Model	Electricity output	Recommended model and potter/red torque of Mitsubishi Magnetic Powder Brake (Clutch)
VA 816-1300	DC 0~1.3A	ZKG.5-10D(Model: ZN/YN): 0.5-10Nm(5-100Kgfm)
		ZX.0.3-1.2YN.,3-12Nm(5-100Kgfm)
		ZKB.0.06-2.5(Model:AN,BN,XN,HBN,YN,WN., 0.6-25)Nm(0.06-2.5Kgfm)
VA 816-3000	DC 0~3.0A	ZKB.5-20(Model:BN,XN,HBN,WN): 50-200 Nm(5-20Kgfm)
		ZKB.5(Model:HC,CM,8-909): 50Nm(5Kgfm)
		ZA.20-40Y,200-400Nm(20-40Kgfm)
VA 816-4500	DC 0~4.5A	ZKB-40 (Model: BN,XN,HBN,WN):400Nm(40Kgfm)
		ZKB-10-20 (Model: HC,CM,B-909): 100-200Nm(10-20Kgfm)
VA 816-6000	DC 0~6.0A	ZKB-40 (Model: CM,B-909): 400Nm(40Kgfm)

Electrical Characteristics

Item	VA-816 1300	VA-816 3000/4500/6000
Power supply	AC 220V±10％ 50/60Hz	
Accuracy	±0.15％ F5	
Temperature	-40□ -0.5□	
Humidity	0-100％ RH	
Storage temperature range	-55℃-125℃	
Output type	Fixed current	
Response time	0.2 sec.	
Input type	DC 0-10V	DC 0-10V DC 4-20Ma DC 0-5V

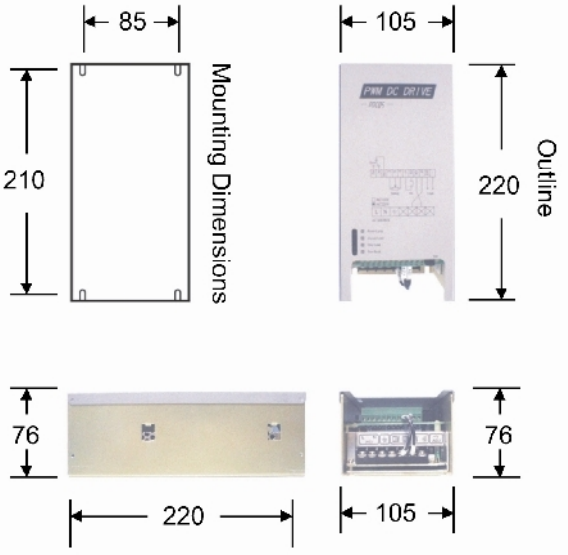
POWDER BRAKES CONTROLLER NIKA®

● Product features :

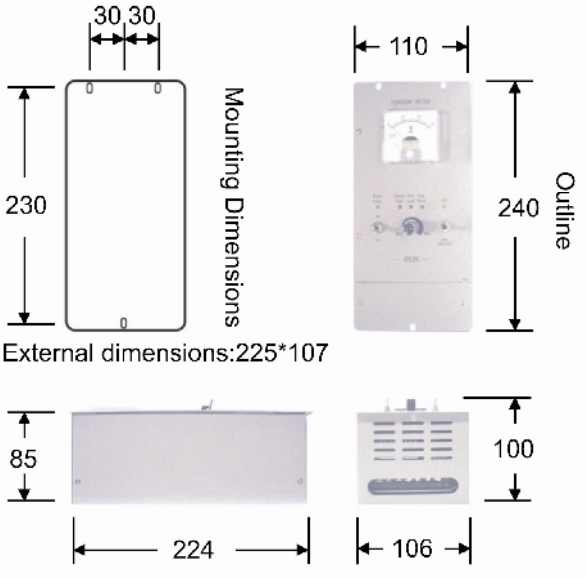
- Adoption PWM mode control output provides accurate of voltage.
- Electron style design with small size, lights weights, easy of installation.
- Has voltage control, current limit, current limit outdated trip, short circuit trip, error to tie point output, fuse break etc preservation and indicated.
- Source voltages can select 110VAC or 220VAC.
- Has close style and open style product can choice.
  - OPEN : Device in distributor inner, external VR setting or linking up signal.
  - CLOSE : Device in face or hang machine side, direct of panel operates.
    Tension meter show in voltage and can change HI (24VDC) or LOW (13VDC) control.
- The design of new mode which improves tradition design shortcoming, quality more equability addition merit promoted.

CLOSE **OPEN**

OPEN

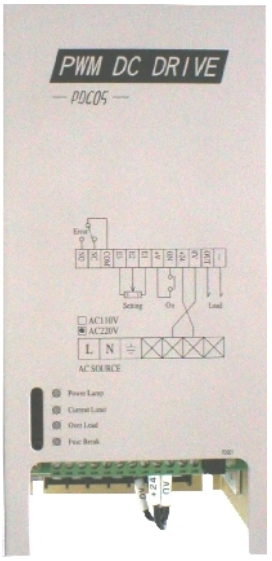


CLOSE



Item	Open	Close
Series	WT-PDC05-□V04-0 □＝1(110V)or2(220V)	WT-PDC05-□V04-0 □＝1(110V)or2(220V)
Dimensions	220L*105W*76H Units:mm	240L*116W*100H Units:mm
Weights	1.2Kg	1.8Kg
Input	1Φ 110V AC 1.9A 50/60Hz 220V AC 0.8A	
Output	HI : 24V DC LOW : 13V DC MAX : 4A	
Alarm contact rating	30V AC : 2A 125V AC : 0.6A	

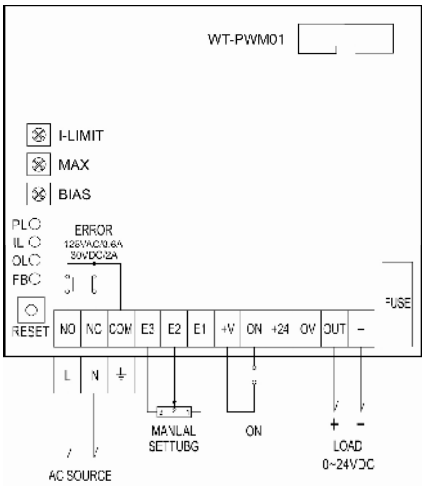
■ OPEN TYPE



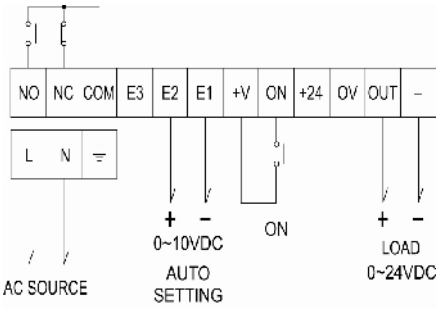
PL : Power Lamp
IL : Current Limit
OL: Over Load
FB : Fuse Break

PB1: RESET

1. MANUAL SETTING



2. AUTO SETTING



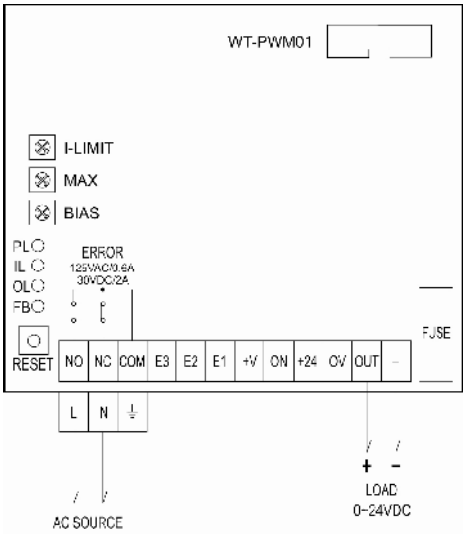
■ CLOSE TYPE

Power Lamp:
Current Limit
Over Load
Fuse Break
ON:

OFF(RESET):ON/OFF,OFF RESET

Manual setting

HI/LO select: HI 24 VDC
LO 13VDC

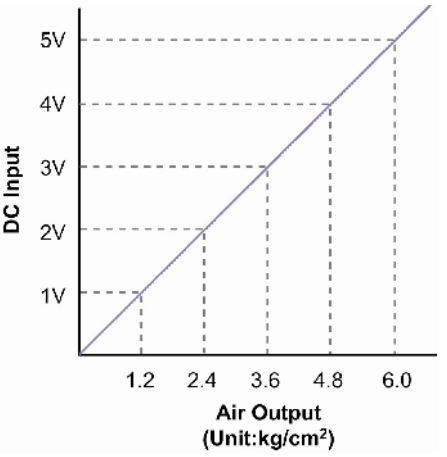


PL: Power Lamp
IL: Current Limit
OL: Over Load
FB: Fuse Break
PB1: RESET

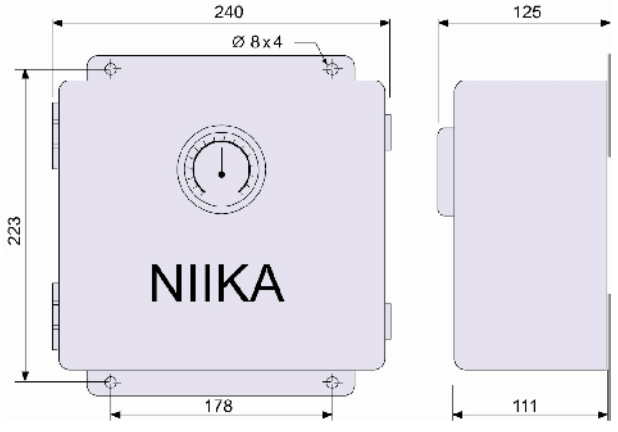
Transfer electric signal input to air pressure output 0-6 kg/cm2

Ordering Code

Model	DC Input	Input independence	Air output
EP-851	0-5 V	100 Ω	0-6 kg/cm2
EP-852	0-10 V	100 Ω	0-6 kg/cm2
EP-853	0-20 mA	250 Ω	0-6 kg/cm2
EP-854	0-100 mA	51 Ω	0-6 kg/cm2
EP-855	4-20 mA	250 Ω	0-6 kg/cm2



Dimension



Electrical Characteristics

Power supply	**AC 220V ± 10% 50/60 Hz**
Input signal	DC Voltage or electric current input
Accuracy	± 1.5%
Sensitive adjustment	0.01-0.1 kg/cm2
Protection	IP43
Air Input	6-8 kg/cm2 clean air
Weight	4.2 kg
Connector	1/4” Soft lube

EGC is a major control product that aromatically aligns the edge of webs. Many companies because of follows advantages have adopted them:

* All movement of material made by uneven speed, pulling stress, material thickness or mechanical damage can be adjusted to the original position by this system.
* Originally reserved material edge can be thus reduced to the minimum to save width of material to be added and reduce cost in material acquisition.
* Increased production, eliminated personnel for watching material and money spent on adjustment of material deviation can also be eliminated so as to reduce your production cost.
* Made your finished product edge smooth and the middle processing elevated of quality, additional value of finished product material increased with much appraisal of down stream customers.
* EGC guides a wide range of materials, including : Plastic Films, Laminated Films, Fabrics, Coated Fabrics, Fiber Materials, Fiberglass, Metal Foils, Papers, Paper Boards. Also, EGC fits onto most type of web machinery, including: Rotogravure presses, Flexography presses. Web offset presses, Label presses, Business Form Presses, Slitters, Sheeters, Die cutters, Bag machines, Bag filling machines, Envelope machines, Laminators, Extruders, Coating machines, Blown film lines, etc.

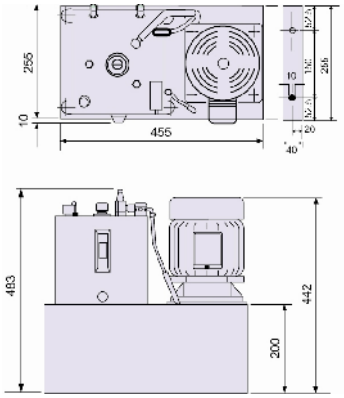
HC-2A

HC-5AM

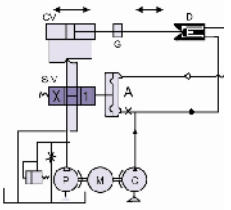
HC-HEI

HC-HE

HC-2A AUTO EDGE GUIDE CONTROLLER



Circuit Component



HC-2A: Air Nozzle Sensor Automatic
This type used to sensing paper, board, foil, rubber, and transparent material but not for mesh materials that edge without any coating

Features :

- Traditional auto EPC, economic and practical.
- Hydraulic pressure adjustable.
- Sensitive movement, high accuracy.
- Long service life.

Driving :

- Motor : 1/2HP、4P 220/380/440 3 phase 50/60HZ
- Pump capacity: 3L/min-5L/min
- Oil tank : 2A 8L，
- Hydraulic pressure : 15kg/cm^2
- Oil : CPC RL68 /SHF 32
- Temperature : -10□ ~+60□
- oil cylinder : Select from cylinder dimension

Sensor :

- fluidic : Air
- air pressure : 200mmH_2O
- Air capacity : 60 L/min,
- Small: material max thickness : 10mm (standard)
- Large: material thickness : 11-30mm (option)

Function :

- cylinder press : 180kg(DIA 40MM cylinder)
- operating speed : 30mm/sec (Unload)
- Accuracy : 0.1mm
- sensitivity : 0.3sec

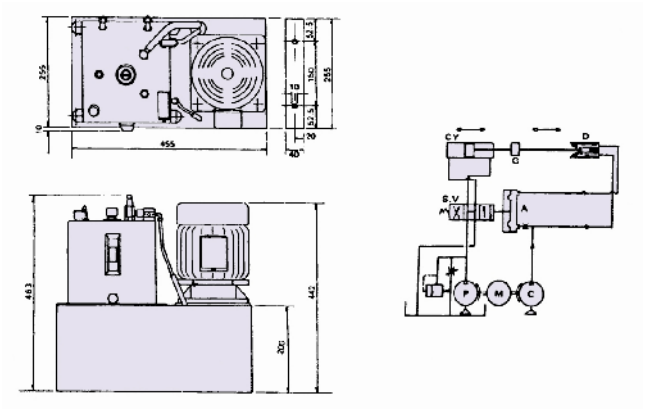
Other :

- weight : 2A 40kg，(without cylinder)
- Installation : horizontal

HC-2AM AUTO / MANUAL EDGE GUIDE CONTROLLER

The specification HC-2AM as HC-2A but with manual control switch to align stand position after material run off and set up.

HC-HEI AUTO PHOTO ELECTRIC EDGE CONTROLLER



HC-HE: Optical Sensor Automatic
This type is ideally suited to sensing paper, board, foil rubber or any other opaque material.

Features :

- Can detect without being affected by outside lights.
- Can detect without being affected by dust and wadding.
- Can sense and detect any color.
- Low trouble, easy to maintain, long life.

Driving :

- motor : 1/2HP、4P 220/380/440 3 phase 50/60HZ
- pump capacity: 3L/min-5L/min
- oil tank : 15L
- Hydraulic pressure : 15kg/cm^2
- oil : CPC RL68/ SHF 32
- temperature : -10℃~+60℃
- oil cylinder : Select from cylinder dimension.

Sensor :

- Optical : HE1
- controller voltage: AC220V

Small: material max thickness : 15mm (standard)
Large: material thickness : 16-30mm (option)

Function :

- cylinder press : 180kg (40φ)
- operating speed : 30mm/sec (Unload)
- precision : 0.2mm

Other :

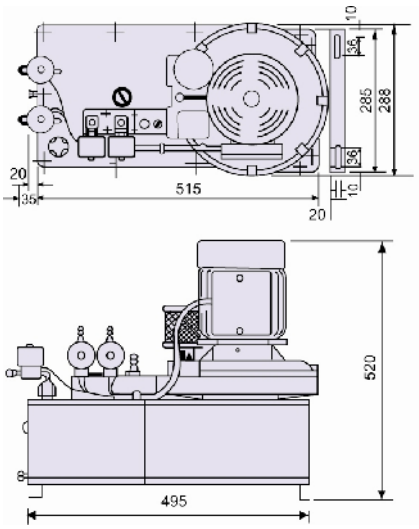
- weight :
- Installation: horizontal

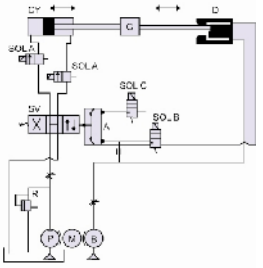
HC-HE AUTO / MANUAL PHOTO ELECTRIC EDGE CONTROLLER

The specification HC-HE as HC-HE 1 but with manual control switch to align stand position after material run off and set up.

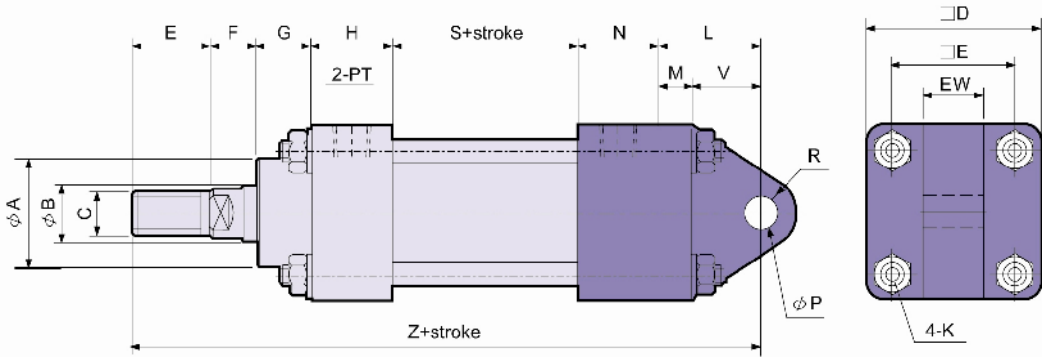
The specification base the same as
HC-2A but several features as below:

1. Temperature does not rise easily
2. The air not easy block because of direct air connection, which bring strong air to blow away of dust and wadding on sensor.

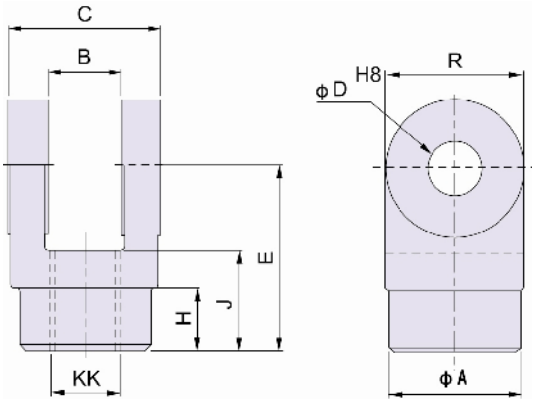




CYLINDER DIMENSIOR:



SIZE / BORE	ΦA	ΦB	C	□D	□DE	E	F	G	H	N	L	M	V	ΦP	R	EW	K	S	Z	PT
Φ40	40	20	M16XP1.5	64	45	28	17	20	30	30	36	11	25	12	13	22	M8XP1.25	50	211	3/8
Φ50	45	20	M16XP1.5	70	50	28	17	20	30	28	36	12	24	12	13	22	M10XP1.25	50	209	3/8



KK	A	B	C	D	E	J	H	R
M14XP1.5	26	16	44	12	56	20	21	14
M16XP1.5	26	16	44	12	56	20	21	14

Installation

The improper mounting of the detector and improper arrangement of the rolls will result in unsatisfactory control performance, or will cause wrinkles to the web. When planning and aligning the process line, the following described items must keep in mind.

A. Unwinding (pay off reel system)

B. If the material wound is irregular, this system guide the edge position and let it regularly into the subsequent process.

The idler roll moves with the unwinding reel stand.

Mount the detector fixed and as close to the idler roll as possible.

The leaving web formed a angle at the deflector roll should more than 30˚

The important, do not allow the web slip on this roll.

The distance between two rolls should be more than the maximum width of the web.

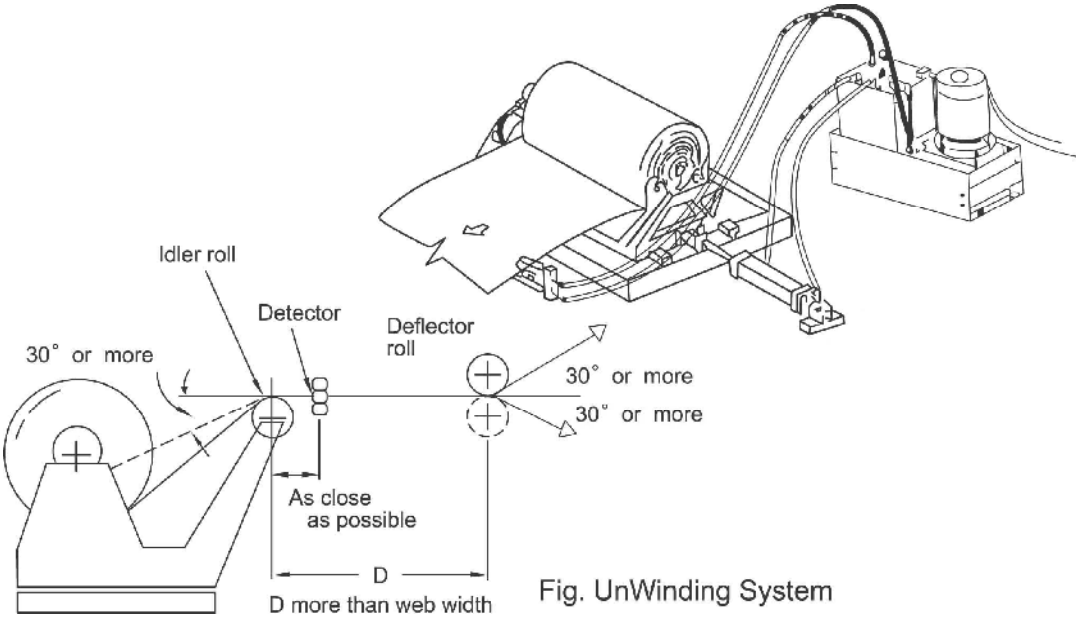


Fig. UnWinding System

B. Rewinding (wind-up reel system)

This reel system to uniform the web of winding up coil with edge alignment.
Mount the deflector roll rigidly and independent from the reel stand. Mount the
The detector on the reel stand-extending arm, so moves together with the wound coil.
The detector located on the entry side of the detector roll as close as possible.
The angle formed by the incoming web on the detector roll is no less then 30˚
Larger diameter and higher friction are preferable to avoid slippage over this roll.
The distanced between the wind-up reel and the detector roll should be more than the maximum with of the web. If distance is too short, winkles will happened on thins or soft web.

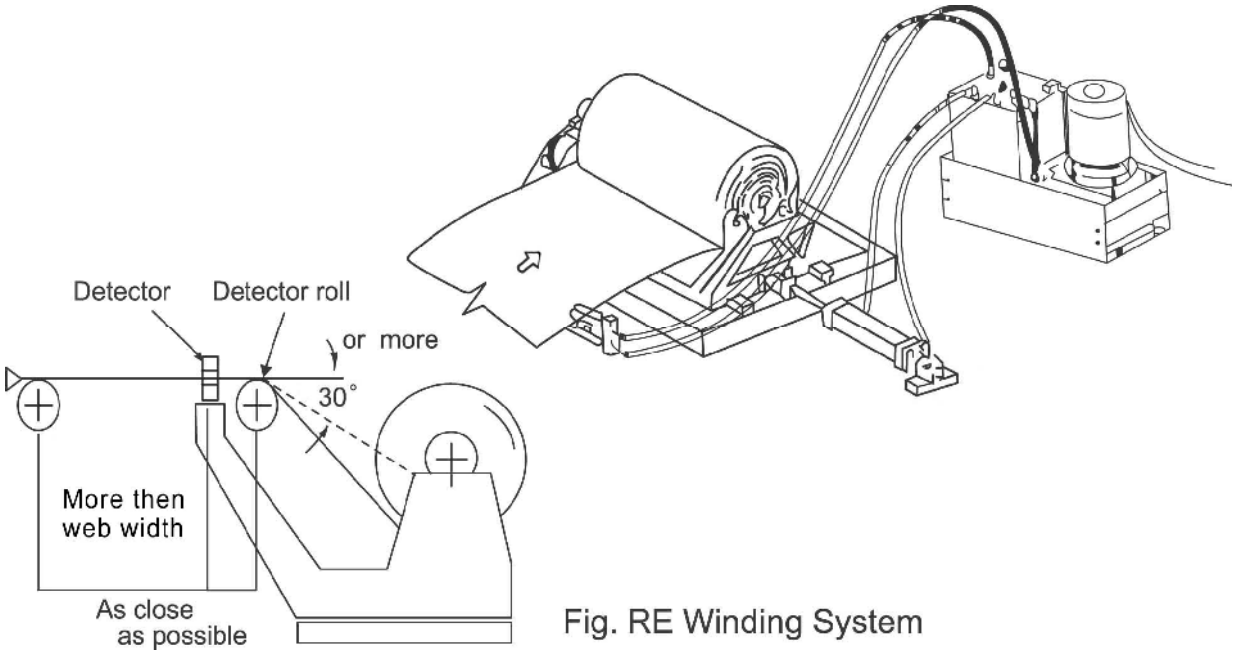


Fig. RE Winding System

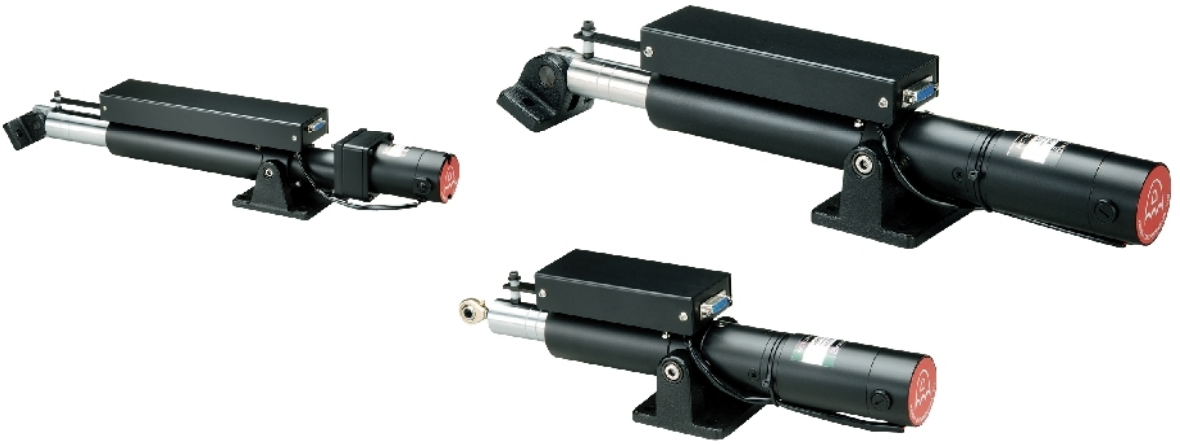
EPC/LPC99A Controller

ADVANTAGE:
Reliable versatile controller for use with Niika photoelectric or ultrasonic sensors.
Capable of line or edge sensing over a wide range of materials. Very easy to set up and calibrate with auto centre function and remote mounting capability. 3 functions for Auto/Manual/Centering.

Model	EPC/LPC99A Controls
Power	AC100V-240V 50/60HZ
Methods	PWM
Temperature	0℃~50℃
Weight	3kg
Material	ABS
Size	(D)182m/mx(W)246m/mx(H)156m/m

Linear Actuators

Electromechanical actuators with built in end of stroke and centre stroke sensors.
Electrical DC Servo actuator with powerful thrust and fast response.
Durable electrical construction without hydraulic piping, can be cleaned easily.



TYPE	THRUSTER	STROKE	MAX STAND WEIGHT	MAX ACTUATOR SPEED	MAX LINE SPEED	Weight
KC80-20	100kg	80m/m	600 KGS	20mm/s	300 MTRS/M	5.5kg
KC150-20	150kg	150m/m	1500 KGS	20mm/s	300 MTRS/M	12.5kg

ES99N OPTICAL SENSOR

ES99N is special design for edge position sensor.
Use white LED instead of tradition light ball.
Maintenance free.

Model	ES99N
Power	±12VDC
Light	WHITE LED
Application	PAPER, FABRIC, MESH EDGE POSITION
Temperature	0℃~50℃
Weight	0.4kg
Material	ZINC/ ALUMINUM ALLOY
Dimension	(L)98m/mx(W)80m/mx(H)30m/m

LS99N OPTICAL SENSOR

LS99N is special design for line position sensor.
Use white LED instead of tradition light ball.
Maintenance free.

Model	LS99N
Power	±12VDC
Light	WHITE LED
Application	PRINT LINE, PAPER PLASTIC FILM LINE POSTION
Sensor distance to material	25~30 mm
Temperature	0℃~50℃
Weight	0.3kg
Material	ZINC/ ALUMINUM ALLOY
Dimension	(L)96m/mx(W)53m/mx(H)30m/m

US99N ULTRASONIC SENSOR

The sensor of US99N is design by ultrasonic and
Special use on paper, transparent file and aluminum foil.
With this sensor that one machine can handle most of
Materials expect the fabric and mesh.

Model	US99N
Power	±12VDC
Application	Paper, aluminum foil, plastic film
Sensor	Ultrasonic
Temperature	0℃~50℃
Weight	0.4kg
Material	ALUMINUM ALLOY
Size	(L)130m/mx(W)92m/mx(H)32m/m