

AIR CUPLAS and HOSES















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CTAL	IDADD CHDIAC		
	IDARD CUPLAS		
3	HI-CUPLA STANDARD General purpose Cupla for air lines	4	HI-CUPLA 200 SERIES One-touch Cupla for air lines
5	LOCK CUPLA 200 SERIES Air line Cupla with safety lock mechanism	6	STAINLESS BALL LOCK CUPLA Hi Cupla Stainless Steel with ball lock
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SAFE	TY CUPLAS		
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HOSI	E COMBINATIONS		
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OTHE	ER CUPLAS		
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21	MINI CUPLA Gas Cuplas for oxygen/acetylene equipment	22	MOLD CUPLA General purpose Cupla Mold coolant port coupling



Owr trademark is your Guarantee of Quality!

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SELECTING THE RIGHT AIR FITTINGS

THE BEST SOLUTION IS TO HAVE THE CORRECT "AIR FLOW" SO YOUR TOOLS WORK AS THEY SHOULD.

HERE ARE A FEW POINTS TO HELP YOU SET UP YOUR AIR SYSTEM TO WORK AS BEST AS POSSIBLE.

- Use fittings with largest air flow.
- · Use fittings that are durable and won't wear - Genuine Nitto Cuplas are all steel and have hardened plugs.
- Make sure you have a big enough compressor to run all the tools you require.
- Use a filter / regulator for clean dry air.
- Use a big enough hose for required air flow.
- If using long hoses you may have to increase diameter to get sufficient air flow.
- · Oil tools daily.



⚠ BEWARE OF IMITATIONS

Similar products that invite misidentification or confusion with Nitto Kohki Cuplas, and products that claim to have compatible mating parts, have recently appeared on the market.

Even if it were possible to connect a Nitto Kohki Cupla with a coupling of another brand, Nitto Kohki cannot accept responsibility for any accident that may result.

Nitto Kohki Cuplas are produced with unique tolerances and precision based on strict quality control and are not interchangeable with couplings made by others. Therefore, their use in connection with another brand of coupling is quite capable of causing sudden damage to the Cupla or personal injury.

When ordering and purchasing, please be sure to check that the following marks are inscribed on Nitto Kohki Cupla products.

If you can't find any NITTO mark on the products you use, enquire with your supplier for Product Liability Insurance.







SAFETY CUPLAS





With the extensive use of Compressed Air in industry today and the ever increasing focus companies have on their OH&S policies to ensure they have a safe work environment for their employees and visitors. Nitto Kohki Australia has released to the Australian market their comprehensive range of SAFETY CUPLAS.

Two of the stand out products in Nitto's range are the FULL BLOW Cupla and the latest release, the PVR Cupla.

The **FULL BLOW** Cupla provides a complete safety system for compressed air outlets in 1/4", 3/8" and 1/2". In addition the release of Nitto's PVR Cupla extended this coverage of complete safety to larger air lines in applications requiring higher flow rates of Compressed Air for particular applications. The PVR Cupla has been designed as an addition to Nitto's 100 Series Cupla for Compressed Air outlets in 1/2", 3/4" and 1".

The ultimate safety features of these two ground breaking products are on -

PVR CUPLA

Page 8

FULL BLOW CUPLA

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HI-CUPLA STANDARD

UNIVERSAL PURPOSE COUPLINGS FOR AIR LINES

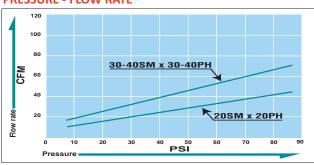
With excellent durability and application characteristics, handles a wide range of tasks from plant air piping to air tool hose connections.

High Quality air coupler with a long history of service.

FEATURES

- One-way automatic shut-off valve in the socket.
- Wide variety provides best choice according to application.
- Hardened important parts are extremely wear resistant and durable.
- Tested 100,000 times, coupler connection is accurate and reliable.

PRESSURE - FLOW RATE



SOCKET

For hose connection (SH)



MODEL	APPLICATION
NC20SH	For 1/4" hose
NC30SH	For 3/8" hose
NC40SH	For 1/2" hose

For female thread connection (SM)



MODEL	APPLICATION
NC20SM	1/4"
NC30SM	3/8"
NC40SM	1/2"

For male thread connection (SF)



MODEL	APPLICATION
NC20SF	1/4"
NC30SF	3/8"
NC40SF	1/2"



Also available in BRASS and STAINLESS STEEL add SUS for Stainless Steel eg 30SHSUS B for Brass

eg 30SHB

SPECIFICATIONS

Body Material		Steel (chrome-plated)
Size	• 1/4" (20 type) •	3/8" (30 type) • 1/2" (40 type)
Working Pressure	215 PSI	1.5 MPa (15 kgf/cm²)
Pressure Resistance	285 PSI	2.0 MPa (20 kgf/cm ²)
Seal Material		Nitrile rubber (NBR)
Working Temperature		-20°C ~ +80°C

INTERCHANGEABILITY

All 20 ($\frac{1}{4}$ "), 30 ($\frac{3}{8}$ "), and 40 ($\frac{1}{2}$ ") model numbers are interchangeable.

Socket dust caps available - NPCQ12434

PLUG

For hose connection (PH)



MODEL	APPLICATION
NC20PH	For 1/4" hose
NC30PH	For 3/8" hose
NC40PH	For 1/2" hose

For female thread connection (PM)



MODEL	APPLICATION
NC10PM	1/8"
NC20PM	1/4"
NC30PM	3/8"
NC40PM	1/2"



MODEL	APPLICATION
NC20PF	1/4"
NC30PF	3/8"
NC40PF	1/2"



HI-CUPLA 200 SERIES

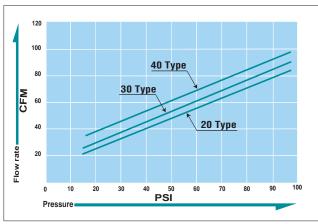
PUSH-TO-CONNECT TYPE FOR AIR LINES WITH HIGH AIR FLOW

Secure connection is obtained easily by a simple one-touch operation!

Larger flow rate!

Superb operation and handling!

PRESSURE - FLOW RATE



SOCKET

For hose connection (SH)



MODEL	APPLICATION
NC200-20SH	For 1/4" hose
NC200-30SH	For 3/8" hose
NC200-40SH	For 1/2" hose

For female thread connection (SM)



MODEL	APPLICATION
NC200-20SM	1/4"
NC200-30SM	3/8"
NC200-40SM	1/2"

For male thread connection (SF)



MODEL	APPLICATION
NC200-20SF	1/4"
NC200-30SF	3/8"
NC200-40SF	1/2"

FEATURES

- ONE-TOUCH CONNECTION Improved handling and operation.
 Simply push the plug into the socket. Secure connection is made.
 Easy to connect/disconnect in narrow or hard-to-reach places.
 Quick connection saves time and improves efficiency.
- LARGE FLOW RATE Adopted with a valve structure which allows more fluid flow. Free swivelling eliminates hose kinking.
 Hardened important parts extremely wear resistant and durable.

SPECIFICATIONS

Body Material		Steel (chrome-plated)
Size	• 1/4" (20 type) •	3/8" (30 type) • 1/2" (40 type)
Working Pressure	215 PSI	1.5 MPa (15 kgf/cm²)
Pressure Resistance	285 PSI	2.0 MPa (20 kgf/cm²)
Seal Material		Nitrile rubber (NBR)
Working Temperature		-5°C ~ +60°C

INTERCHANGEABILITY

Can be connected to Hi-Cupla Models 20, 30 and 40. Interchangeable with all Hi-Cupla Series products.

Socket dust caps available - NPCQ12434

PLUG

For hose connection (PH)



MODEL	APPLICATION
NC20PH	For 1/4" hose
NC30PH	For 3/8" hose
NC40PH	For 1/2" hose

For female thread connection (PM)



MODEL	APPLICATION
NC10PM	1/8"
NC20PM	1/4"
NC30PM	3/8"
NC40PM	1/2"



MODEL	APPLICATION
NC20PF	1/4"
NC30PF	3/8"
NC40PF	1/2"



LOCK CUPLA 200 SERIES

ONE-TOUCH, QUICK-CONNECTING AIR LINE CUPLA WITH LOCK MECHANISM

One-touch for smooth connection.

Internal lock mechanism for safety!

Secure connection is obtained easily by a simple one-touch operation!

Larger flow rate!

Superb operability is realised!

FEATURES

- Lock mechanism prevents unexpected disconnection after connection. Suitable for intermediate Cupla for hose extensions.
- Simply push the plug into the socket (or socket over plug) for one-touch connection. Excellent handling improves working efficiency.

SOCKET

For hose connection (SH)



MODEL	APPLICATION
NCL-20SH	For 1/4" hose
NCL-30SH	For 3/8" hose
NCL-40SH	For 1/2" hose

For female thread connection (SM)



MODEL	APPLICATION
NCL-20SM	1/4"
NCL-30SM	3/8"
NCL-40SM	1/2"

For male thread connection (SF)



MODEL	APPLICATION
NCL-20SF	1/4"
NCL-30SF	3/8"
NCL-40SF	1/2"

For hose with spring nut connection (SNRG)

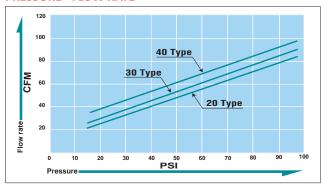


MODEL	APPLICATION
NCL200-65SNRG	For ø6.5 x ø10.0 hose
NCL200-85SNRG	For ø8.5 x ø12.5 hose

- Ball bearing type swivel mechanism reduces load on hands and prevents hose twisting. (SNRG model)
- For hose connection, simply slide it over the nipple and tighten the nut. (SNRG model)
- Spring nut to prevent hose kinking is standard equipment. (SNRG model)
- Low pressure loss valve mechanism gives improved flow rate.

Socket dust caps available - NPCQ12434

PRESSURE - FLOW RATE



PLUG

For hose connection (PH)



MODEL	APPLICATION
NC20PH	For 1/4" hose
NC30PH	For 3/8" hose
NC40PH	For 1/2" hose

For female thread connection (PM)



MODEL	APPLICATION
NC10PM	1/8"
NC20PM	1/4"
NC30PM	3/8"
NC40PM	1/2"



MODEL	APPLICATION
NC20PF	1/4"
NC30PF	3/8"
NC40PF	1/2"



STAINLESS BALL LOCK CUPLA

QUICK CONNECTING STAINLESS STEEL AIRLINE CUPLA WITH LOCK MECHANISM

Internal lock mechanism for safety.

Stainless steel body for extreme environments.

Secure connection is easily obtained by a simple operation.

Superb operability is realised.



- Suitable for intermediate cupla for hose extension.
- Excellent handling improves efficiency.
- One-way automatic shut off valve in socket.

INTERCHANGEABILITY

Can be connected with the plugs of Hi-Cupla.

SOCKET

For hose connection (SH)



MODEL	APPLICATION
NC20SHLOCKSUS	For 1/4" hose
NC30SHLOCKSUS	For 3/8" hose
NC40SHLOCKSUS	For 1/2" hose

For female thread connection (SM)



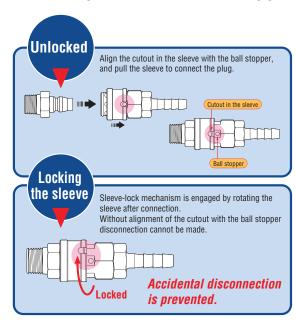
MODEL	APPLICATION
NC20SMLOCKSUS	1/4"
NC30SMLOCKSUS	3/8"
NC40SMLOCKSUS	1/2"

For male thread connection (SF)



MODEL	APPLICATION
NC20SFLOCKSUS	1/4"
NC30SFLOCKSUS	3/8"
NC40SFLOCKSUS	1/2"

Safety Sleeve-Lock Type



PLUG

For hose connection (PH)



MODEL	APPLICATION
NC20PHSUS	For 1/4" hose
NC30PHSUS	For 3/8" hose
NC40PHSUS	For 1/2" hose

For female thread connection (PM)



MODEL	APPLICATION
NC20PMSUS	1/4"
NC30PMSUS	3/8"
NC40PMSUS	1/2"



MODEL	APPLICATION
NC20PFSUS	1/4"
NC30PFSUS	3/8"
NC40PFSUS	1/2"



HI-CUPLA - BRASS & STAINLESS

BRASS OR STAINLESS STEEL CUPLA SUITABLE FOR WATER OR AIR

SOCKET

For hose connection (SH)



BRASS	S/STEEL	APPLIC
NC20SHB	NC20SHSUS	1/4"
NC30SHB	NC30SHSUS	3/8"
NC40SHB	NC40SHSUS	1/2"

For female thread connection (SM)



BRASS	S/STEEL	APPLIC
NC20SMB	NC20SMSUS	1/4"
NC30SMB	NC30SMSUS	3/8"
NC40SMB	NC40SMSUS	1/2"

For male thread connection (SF)



BRASS	S/STEEL	APPLIC
NC20SFB	NC20SFSUS	1/4"
NC30SFB	NC30SFSUS	3/8"
NC40SFB	NC40SFSUS	1/2"

PLUG

For hose connection (PH)



BRASS	S/STEEL	APPLIC
NC20PHB	NC20PHSUS	1/4"
NC30PHB	NC30PHSUS	3/8"
NC40PHB	NC40PHSUS	1/2"

For female thread connection (PM)



BRASS	S/STEEL	APPLIC
NC20PMB	NC20PMSUS	1/4"
NC30PMB	NC30PMSUS	3/8"
NC40PMB	NC40PMSUS	1/2"

For male thread connection (PF)



BRASS	S/STEEL	APPLIC
NC20PFB	NC20PFSUS	1/4"
NC30PFB	NC30PFSUS	3/8"
NC40PFB	NC40PFSUS	1/2"

HI-CUPLA 100 SERIES - BRASS & STAINLESS

SOCKET

For hose connection (SH)



BRASS	S/STEEL	APPLIC
NC400SHB	NC400SHSUS	1/2"
NC600SHB	NC600SHSUS	3/4"
NC800SHB	NC800SHSUS	1"

For female thread connection (SM)



BRASS	S/STEEL	APPLIC
NC400SMB	NC400SMSUS	1/2"
NC600SMB	NC600SMSUS	3/4"
NC800SMB	NC800SMSUS	1"

For male thread connection (SF)



BRASS	S/STEEL	APPLIC
NC400SFB	NC400SFSUS	1/2"
NC600SFB	NC600SFSUS	3/4"
NC800SFB	NC800SFSUS	1"

PLUG

For hose connection (PH)



BRASS	S/STEEL	APPLIC
NC400PHB	NC400PHSUS	1/2"
NC600PHB	NC600PHSUS	3/4"
NC800PHB	NC800PHSUS	1"

For female thread connection (PM)



BRASS	S/STEEL	APPLIC
NC400PMB	NC400PMSUS	1/2"
NC600PMB	NC600PMSUS	3/4"
NC800PMB	NC800PMSUS	1"



BRASS	S/STEEL	APPLIC
NC400PFB	NC400PFSUS	1/2"
NC600PFB	NC600PFSUS	3/4"
NC800PFB	NC800PFSUS	1"



AIR LINE COUPLING WITH BUILT-IN RESIDUAL AIR PRESSURE RELEASE FUNCTION

OPEN

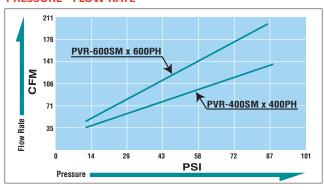
Purge function and sleeve lock for large diameter air hoses 1/2", 3/4" and 1".

Eliminates stored energy in hoses.

FEATURES

- Connection to the PVR Cupla is made with no residual pressure which enables the user to connect the plug to the socket with ease.
- Once connection is made there is a visual window on the Cupla so the operator can identify the status of the Cupla valve, 'open' or 'shut'.

PRESSURE - FLOW RATE



SOCKET

For hose connection (SH)



MODEL	APPLICATION
NCPVR-400SH	For 1/2" hose
NCPVR-600SH	For 3/4" hose
NCPVR-800SH	For 1" hose

For female thread connection (SM)



MODEL	APPLICATION
NCPVR-400SM	1/2"
NCPVR-600SM	3/4"
NCPVR-800SM	1"

For male thread connection (SF)



MODEL	APPLICATION
NCPVR-400SF	1/2"
NCPVR-600SF	3/4"
NCPVR-800SF	1"

- The front blue collar of the Cupla is then easily rotated to activate the Compressed Air at the same time activating the lock mechanism automatically, the visual window will now show the valve as 'open'.
- When the collar is returned to the original position the compressed air energy stored in the hose is then safely purged from the air line enabling safe disconnection with no reaction.

SPECIFICATIONS

Body Material	Zinc Die Cast, brass and others			
Size	• 1/2" (400 type)	3/4" (600 type)	• 1" (800 type)	
Working Pressure	215 PSI	1.5N	ЛРа (15 kgf/cm²)	
Pressure Resistance	285 PSI	2.01	ЛРа (20 kgf/cm²)	
Packing Material		Nitr	ile rubber (NBR)	
Working Temperature			-5°C ~ +60°C	

INTERCHANGEABILITY

Can be connected with plugs of Hi-Cupla Models 400, 600 and 800.

Socket dust caps available - NPCA83039

PLUG

For hose connection (PH)



MODEL	APPLICATION
NC400PH	For 1/2" hose
NC600PH	For 3/4" hose
NC800PH	For 1" hose

For female thread connection (PM)



MODEL	APPLICATION
NC400PM	1/2"
NC600PM	3/8"
NC800PM	1"



MODEL	APPLICATION
NC400PF	1/2"
NC600PF	3/4"
NC800PF	1"



LOW PRESSURE LOSS & HIGH FLOW RATE

Unique full-open gate type valve mechanism realises low pressure loss and high flow rate, which reduces required source air volume.



SPECIFICATIONS

Body Material		Aluminum alloy
Working Pressure	215 PSI	1.5 MPa (15 kgf/cm²)
Pressure Resistance	285 PSI	2.0 MPa (20 kgf/cm²)
Flow Rate		2.933/min. (103 CFM)
Seal Material		Nitrile rubber (NBR)
Working Temperature		-5°C ~ +60°C

INTERCHANGEABILITY

Can be connected to Hi-Cupla Models 20, 30 and 40. Interchangeable with all Hi-Cupla Series products.

Socket dust caps available - NPCQ12434

SOCKET

For urethane hose connection (SN)



MODEL	APPLICATION
NCFBH-65SN	For ø6.5 x ø10 hose
NCFBH-85SN	For ø8.5 x ø 12.5 hose
NCFBH-110SN	For ø11 x ø16 hose

For female thread connection (SM)



MODEL	APPLICATION
NCFBH-20SM	1/4"
NCFBH-30SM	3/8"
NCFBH-40SM	1/2"

No residual pressure on connection or disconnection!

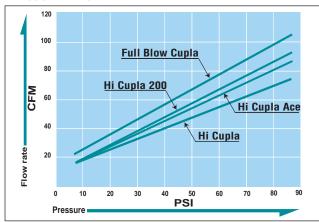
Safety Lock Mechanism.

Safety Purge Function.

FEATURES

- The flow rate is increased by up to 40% more than that of conventional Cuplas.
- · Built-in sleeve lock mechanism prevents unexpected disconnection of Cuplas, assuring safe operation.
- The valve can be opened and closed while the socket and plug is connected.
- The weight is reduced by 30 to 45% compared with that of conventional Cuplas.

PRESSURE - FLOW RATE



SOCKET

For male thread connection (SF)



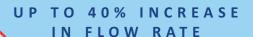
MODEL	APPLICATION
NCFBH-20SF	1/4"
NCFBH-30SF	3/8"
NCFBH-40SF	1/2"

For hose connection (SH)



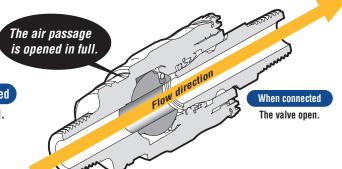
MODEL	APPLICATION
NCFBH-20SH	For 1/4" hose
NCFBH-30SH	For 3/8" hose
NCFBH-40SH	For 1/2" hose





Pressure loss is reduced to the ultimate level. Up to 40% increase in flow rate compared with conventional Cuplas.

When disconnected The valve closed.



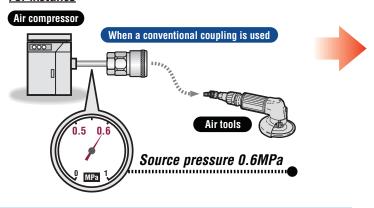
ENERGY SAVING EFFECT

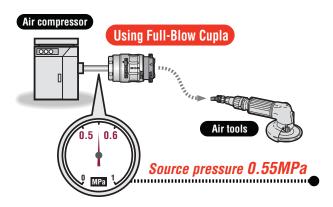
If conventional Cuplas are replaced by Full-Blow Cuplas, pressure loss in the air lines can be reduced. Thanks to this, the source pressure at the outlet port of the compressor can be saved.

Note: Energy saving effect depends on the conditions of air piping and the compressor.

UNII	CUNVERSION	IABLE
	Pressure	
PSI	MPa	kgf/cm²
145	1.0	10
215	1.5	15
285	2.0	20

For instance



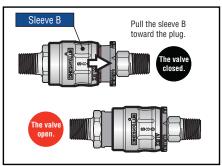


HOW IT WORKS

1. Open the valve

Only after connection with the plug, you can slide the socket sleeve B toward the plug in order to open the built-in valve.

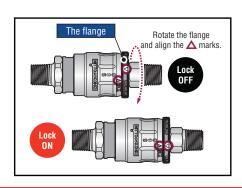
Full flow path is then obtained.



2. Lock the sleeve

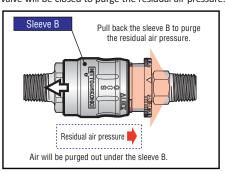
When connected, the ball valve rotates to open the fluid passage.

Rotate the flange to lock the sleeve B. Without unlocking the plug you cannot disconnect



3. Purge the residual air

To disconnect the plug, first turn the flange back to the original position for unlocking and then pull the sleeve B back to the original position. The built-in valve will be closed to purge the residual air pressure.





FOR AIR LINES WITH PURGE MECHANISM - ANTI-WHIP SAFETY

Unpleasant noise on disconnection of cuplas and reaction of the hose are prevented!

FEATURES

- The remaining pressurised air inside the hose is gradually released on disconnection of Cuplas, which solves the unpleasant noise and reaction of hose (hose whip).
- Original purging design allows remaining pressurised air to exhaust quickly and silently.
- Original simple purge structure is superior in durability.
- Can be used with reliability, even when the pressure is high or the hose is long.

INTERCHANGEABILITY

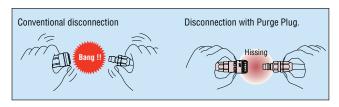
Interchangeable with Hi-Cupla 20, 30 and 40 models and all Hi-Cupla series products.

PLUG

For hose connection (PH)



MODEL	APPLICATION
NCPV-20PH	For 1/4" hose
NCPV-30PH	For 3/8" hose
NCPV-40PH	For 1/2" hose



SPECIFICATIONS

Body Material		Steel (chrome-plated)
Size	• 1/4" (20 type) •	3/8" (30 type) • 1/2" (40 type)
Working Pressure	145 PSI	1.0 MPa (10 kgf/cm²)
Pressure Resistance	215 PSI	1.5 MPa (15 kgf/cm²)
Seal Material		Nitrile rubber (NBR)
Working Temperature		-5°C ~ +60°C

PLUG

For urethane hose connection (PN)



MODEL APPLICATION	
NCPV-65PN	For ø6.5 x ø10.0 hose
NCPV-85PN	For ø8.5 x ø12.5 hose

PURGE HI CUPLA

AIR LINE CUPLA WITH SAFETY PURGE & LOCK MECHANISM

One-touch connection irrespective of internal pressure!

Eliminates unpleasant noise and reaction on disconnection.

FEATURES

- Just push the plug in for one-touch connection. It's a single-handed operation.
- The exclusive lever action allows the valve to be opened and closed at will with the Cupla connected.
- Air is removed from the piping on the plug side, eliminating unpleasant shock and noise on disconnection.
- Safety design prevents the lever operated valve from opening when the plug is not connected.
- The possibility of connecting the Hi-Cupla plug gives excellent universal compatibility.

SPECIFICATIONS

Body Material		Brass (chrome-plated)
Size	• 1/4" (20 type) •	3/8" (30 type) • 1/2" (40 type)
Working Pressure	145 PSI	1.0 MPa (10 kgf/cm²)
Pressure Resistance	215 PSI	1.5 MPa (15 kgf/cm²)
Seal Material	Nitrile rubber (NBR)	
Working Temperature		-5°C ~ +60°C

Socket dust caps available - NPCQ12434





MODEL	APPLICATION
NCPV-20SM	1/4" male
NCPV-30SM	3/8" male
NCPV-40SM	1/2" male



FOR PNEUMATIC TOOLS AND DEVICES

Newly Developed rotary function allows 360° rotation!

Great improvement for handling of pneumatic tools!

FEATURES

- Rotary plug for hose connection to pneumatic tools and pneumatic devices.
- Fits to the tool at 45° angle and eliminates annoying transfer of hose load.
- In pursuit of workability, we achieved a compact design by simplifying the body structure. Now lighter and smaller than previous models.
- New dust-proof design for durability.
- For air tackers, nailers, impact wrenches and other pneumatic tools.

SPECIFICATIONS

Body Material	Steel (nickel-plated)	
Size	• 1/4" (20 type) • 3/8" (30 type)	
Working Pressure	215 PSI	1.5 MPa (15 kgf/cm²)
Pressure Resistance	285 PSI	2.0 MPa (20 kgf/cm²)
Packing Material		Nitrile rubber (NBR)
Working Temperature		-5°C ~ +60°C

INTERCHANGEABILITY

Interchangeable with Hi-Cupla 20, 30 and 40 models and all Hi-Cupla series products.

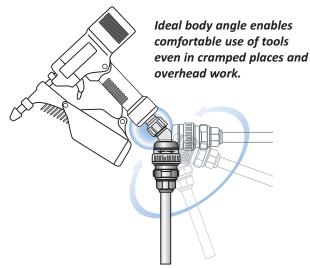
PLUG

For female thread connection (PM)



MODEL	APPLICATION
NCRL-20PM	1/4"
NCRL-30PM	3/8"





PLUG

For parallel thread connection (PFF)



MODEL	APPLICATION
NCRL-20PFF	1/4"

GLOSSARY

The meaning of each letter in the model name

The model name of a Cupla indicates its size, whether plug or socket, and the end configuration. Rated pressure is also shown for some hydraulic Cuplas. Check the following tables to understand the model name implication before making your selection.

Body Material

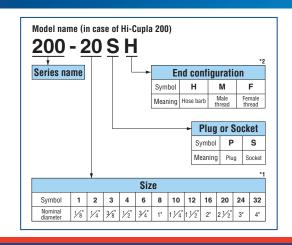
This indicates the material that is used for the plug body or socket body that form the flow path of fluid through the Cupla. Some products have internal components or a different material. Please check with us for details.



This indicates the nominal size of the pipe thread connection or of the hose to be used.

Pressure

Working Pressure: Pressure Resistance: This shows the normal allowable fluid pressure under continuous use. This shows the maximum pressure that will not affect the performance of the Cupla even if there is a temporary increase to reach the pressure.





LIGHTWEIGHT PLASTIC COUPLING WITH SAFETY LOCK FOR AIRLINE APPLICATIONS

Plastic Cuplas with sleeve lock for safety operation! Pressure ratings comparable to steel Cuplas.



FEATURES

- The weight is a quarter of steel Hi Cuplas for easy handling.
- A built-in "lock mechanism" to lock the sleeve when connected, thus prevents accidental detachment.
- Just push plug into socket for simple connection.
- Can be used for air, water and inert gases.
- Plastic body will cause minimum risk of damage even when in contact with tools or equipment.
- Air flows in either direction from plug or from socket side when coupled.

INTERCHANGEABILITY

Can be connected to Hi-Cupla Models 20, 30 and 40. Interchangeable with all Hi-Cupla Series products.

Socket dust caps available - NPCQ12434

ONE-TOUCH CONNECTION



SPECIFICATIONS

Applicable fluids			Air, water, inert gases
Material		Engine	ering plastics (PBT, POM)
Size	• 1/4" (20 type) • 3/8" (30 type)		
	HA-50SNG	ø5m	mxø8mm urethane hose
	HA-65SNG	ø6.5mr	mxø10mm urethane hose
	HA-85SNG	ø8.5mm	xø12.5mm urethane hose
	HA-T	Inlet: 20F	P-PLA Outlet: HA-65Sx2
Working Pressure		215 PSI	1.5 MPa (15 kgf/cm ²)
	for Model HA-T	145 PSI	1.0 MPa (10 kgf/cm ²)
Pressure Resistance		285 PSI	2.0 MPa (20 kgf/cm ²)
	for Model HA-T	215 PSI	1.5 MPa (15 kgf/cm ²)
Seal Material			Nitrile rubber (NBR)
Working Temperature			-5°C ~ +60°C

FLUID FLOW DIRECTION



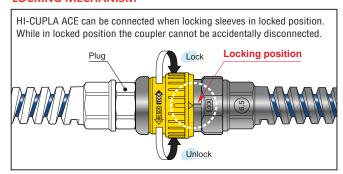
OPTIONS

Steel Cuplas with spring nut are available.

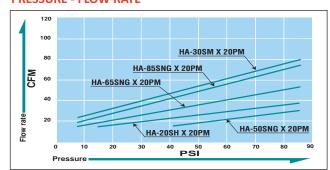




LOCKING MECHANISM



PRESSURE - FLOW RATE



SOCKET



MODEL	APPLICATION
NCHA-20SH	For 1/4" hose
NCHA-30SH	For 3/8" hose

For female thread connection (SM)



MODEL	APPLICATION
NCHA-20SM	1/4"
NCHA-30SM	3/8"

For urethane hose connection (SNG)



MODEL	APPLICATION
NCHA-50SNG	For ø5 x ø8 hose
NCHA-65SNG	For ø6.5 x ø10.0 hose
NCHA-85SNG	For ø8.5 x ø12.5 hose

T Type (for two branch lines)



MODEL	APPLICATION
NCHA-T	20P-PLA / HA-65Sx2

PLUG

For hose connection (PH)



MODEL	APPLICATION
NC20PH-PLA	For 1/4" hose
NC30PH-PLA	For 3/8" hose

For female thread connection (PM)



MODEL	APPLICATION
NC20PM-PLA	1/4"
NC30PM-PLA	3/8"

For urethane hose connection (PNG)



MODEL	APPLICATION
NC50PNG-PLA	For ø5 x ø8 hose
NC65PNG-PLA	For ø6.5 x ø10.0 hose
NC85PNG-PLA	For ø8.5 x ø12.5 hose

For parallel male thread connection (PFF)



MODEL	APPLICATION
NC20PFF-PLA	1/4"



AIR LINE CUPLA WITH AIR DUSTER FUNCTION

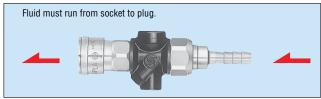
Three roles in one: Cupla, Duster, Swivel! Dusts without removing the tool!



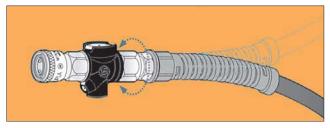
FEATURES

- Improves working efficiency by enabling dusting while tool is still connected.
- Ball bearing swivel mechanism eliminates hose twisting and reduces load on hands.
- Application of pressure balance valve enables easier Duster button control.
- Emptying drain before starting work is also simple.

FLUID FLOW DIRECTION



SWIVELLING MECHANISM



SOCKET

For hose connection (PH)



MODEL	APPLICATION
NCDCS-20PH	For 1/4" hose
NCDCS-30PH	For 3/8" hose
NCDCS-40PH	For 1/2" hose

SPECIFICATIONS

Body M	laterial	Body: Aluminum / Cupla: Steel (Chrome-plated)		
Size	For 1/4", 3/8", 1/2'	4", 3/8", 1/2" hose, for ø6.5 x ø10, ø8.5 x ø12.5 urethane hose		
Workin	g Pressure	145 PSI	1.0 MPa (10 kgf/cm²)	
Pressur	Pressure Resistance 215 PSI 1.5 MPa (15 kgf		1.5 MPa (15 kgf/cm²)	
Seal Ma	Seal Material Nitrile rubber (NBR)		Nitrile rubber (NBR)	
Workin	g Temperature		-5°C ~ +60°C	

INTERCHANGEABILITY

Can be connected to Hi-Cupla Models 20, 30 and 40. Interchangeable with all Hi-Cupla Series products.

Socket dust caps available - NPCQ12434

SUITABILITY FOR VACUUM APPLICATIONS

Not suitable for use with vacuum, either alone or in combination.

APPLICATIONS

- For factory facilities, air lines
 Machine tools, Woodworking Machines, Packing Machines
- For car maintenance, sheet metal processing Sanders, Grinders, Polishers

COMPACT DUSTING FUNCTION



SOCKET

For urethane hose connection (PNG)



MODEL	APPLICATION
NCDCS-65PNG	For ø6.5 x ø10.0 hose
NCDCS-85PNG	For ø8.5 x ø12.5 hose



AIR LINE MANIFOLDS

FEATURES

Solid Construction.

1/2" inlet allows sufficient airflow to outlets.

Fully threaded outlets to ensure secure & safe cupla connection.

Fitted with high flow Nitto 200 Series Hi-Cuplas.



MODEL NCM-2WAY



MODEL
NCM-3WAY

LINE CUPLA

SIMPLE BRANCHING AIR LINE CUPLA

Enables several air lines to be taken simultaneously from one supply line! Gives speedy branching of Hi-Cuplas.

* These products are supplied with dust caps as standard



MODEL NC200-TM



MODEL NC200-LM



MODEL NC200-SM

ROTARY LINE CUPLA

ROTATING TYPE SIMPLE BRANCHING AIR LINE CUPLA

Several air outlets can be turned freely through 360° Speedy branching of Hi-Cupla lines.

 $\ensuremath{^{*}}$ These products are supplied with dust caps as standard



MODEL NCRT



MODEL NCRE





POLYURETHANE COILED HOSES

COILED HOSE FITTED WITH NITTO 200 SERIES NUT CUPLA

Non-kinking!

Excellent flexibility even at low temperatures.





SPIRAL HOSE COMPLETE WITH NITTO 200 SERIES NUT CUPLA

MODEL	MANUF NO.	SIZE MM	WORKING LENGTH
NHA-MF-4	HA1005B	10 x 6.5	4m
NHA-MF-6	HA1008B	10 x 6.5	6m

SPIRAL HOSE COMPLETE WITH NITTO 1/4" BSP Brass Fittings

MODEL	MANUF NO.	SIZE MM	WORKING LENGTH
NHA-BSP04-4	HA1005F	10 x 6.5	4m
NHA-BSP04-6	HA1008F	10 x 6.5	6m

FEATURES

- Oil resistant.
- Excellent memory and stores neatly.
- Small coil diameter stops tangling.
- Straight end sections eliminates hose splitting.
- Hose sizes designed for use with Nitto type nut coupling and fittings, therefore hose clamps are not used.
- No air leakage.

OTHER COMBINATIONS AVAILABLE UPON REQUEST (BSP).

MODEL	SIZE MM	WORKING Length	MODEL	SIZE MM	WORKING LENGTH
HA0803B	8 x 5	2m	HA1010B	10 x 6.5	8m
HA0805B	8 x 5	4m	HA1203B	12 x 8	2m
HA0808B	8 x 5	6m	HA1205B	12 x 8	4m
HA0810B	8 x 5	8m	HA1208B	12 x 8	6m
HA1003B	10 x 6.5	2m	HA1210B	12 x 8	8m

NUT CUPLA & NUT CUPLA 200

FOR FITTING TO URETHANE HOSE

No hose clamp required!

Simple and secure connection to urethane hose.

FEATURES

- Same series as Hi-Cupla and Hi-Cupla 200.
- No protruding hose clamping band screw to snag when the hose is moved.
- To fit hose, simply slide it over the nipple and tighten the nut.
- Tightening outside of hose reduces hose slipping or fluid leaking.

PLUG

For urethane hose connection (PN)



MODEL	APPLICATION
NC50PN	For ø5.0 x ø8.0 hose
NC65PN	For ø6.5 x ø10.0 hose
NC85PN	For ø8.5 x ø12.5 hose
NC110PN	For ø11.0 x ø16.0 hose



SOCKET

For urethane hose connection (SN)



MODEL	APPLICATION
NC200-50SN	For ø5.0 x ø8.0 hose
NC200-65SN	For ø6.5 x ø10.0 hose
NC200-85SN	For ø8.5 x ø12.5 hose
NC200-110SN	For ø11.0 x ø16.0 hose



PIRTEK HOSE ASSEMBLIES

INDUSTRY STANDARD ASSEMBLIES

Rubber Safety Yellow Air compressor assembly



FEATURES

- 19mm x 20 metres.
- Assembly complete with type A Claw Fittings.

MODEL	SIZE
IRYCAS-019ASS	19mm x 20 metres

Air Line Kit



FEATURES

• 10mm Premium Airline Assembly fitted with 1/4" BSPT male brass fittings each end.

MODEL	SIZE
IPAF-010ASS	10mm x 20 metres

Select an appropriate Cupla for the job

Nitto Kohki has a wide range of Cuplas covering almost every application and feature you need. In order to select an appropriate Cupla for your job, you need to realise the following specifications.

Specifications to be checked when selecting Cuplas

Fluid and the temperature

Select a Cupla with body and seal materials that suit the fluid and its temperature.

Fluid Pressure

Select a Cupla suitable for the actual maximum fluid pressure.

Automatic Shut-off Valve
Select a Cupla with a valve structure that suits the piping application.

Operating Environment

Select a Cupla with design and materials that suit each operating environment.

Size and type of end configurations Finally, and critically specify the size and type of end configurations.





CUPLA is a registered trademark of Nitto Kohki Co., Ltd.





FOR GASES AND LIQUIDS

Two-way shut-off cupla for medium pressure applications.

Large flow type SP Cupla

Also available in BRASS, STEEL and STAINLESS STEEL 304





The SP Cupla has been recreated with new features

FEATURES

- Increased flow rates (7% for model 1SP and up to 64% for model 6SP).
- New valve assembly provides a better seal.
- Smooth and immediate connection.



New self-aligned valve design provides better seal

FLUID FLOW DIRECTION



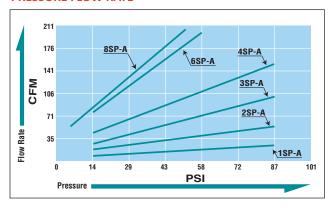
SOCKET

For male thread connection



BRASS	STAINLESS STEEL	APPLICATION
NC1SB	NC1SSUS	1/8"
NC2SB	NC2SSUS	1/4"
NC3SB	NC3SSUS	3/8"
NC4SB	NC4SSUS	1/2"
NC6SB	NC6SSUS	3/4"
NC8SB	NC8SSUS	1"

PRESSURE FLOW RATE



SPECIFICATIONS

Body Material	BRASS		STAINLESS STEEL/STEEL	
Size	1/8" 1/4" 3/8"	1/2" 3/4" 1"	1/8" 1/4" 3/8"	1/2" 3/4" 1"
Working Pressure MPa kgf/cm²	5.0 51	3.0 31	7.5 76	4.5 46
Pressure Resist. MPa kgf/cm²	7.5 76	4.5 46	10.0 102	6.5 66
Seal Material	Nitrile rubber (NBR)			
Working Temperature	-20°C ~ +80°C			

INTERCHANGEABILITY

Different sizes are not interchangeable with each other. Interchangeable with conventional SP Cupla in the same size.

PLUG



BRASS	STAINLESS STEEL	APPLICATION
NC1PB	NC1PSUS	1/8"
NC2PB	NC2PSUS	1/4"
NC3PB	NC3PSUS	3/8"
NC4PB	NC4PSUS	1/2"
NC6PB	NC6PSUS	3/4"
NC8PB	NC8PSUS	1"



FOR GASES AND LIQUIDS

Straight-thru Cupla for medium pressure applications.

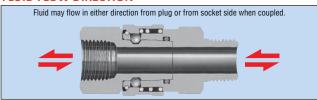


FEATURES

- Valveless structure suits high viscosity fluids.
- Various body materials, sizes and end configurations.
- Wide range of seal materials for diversified applications with fluids

FLUID FLOW DIRECTION

Non-Valved



SOCKET

For hose connection (TSH)



MODEL	APPLICATION	MODEL	APPLICATION
NC1TSHB	For 1/8" hose	NC4TSHB	For 1/2" hose
NC2TSHB	For 1/4" hose	NC6TSHB	For 3/4" hose
NC3TSHB	For 3/8" hose	NC8TSHB	For 1" hose

For female thread connection (TSM)



MODEL	APPLICATION	MODEL	APPLICATION
NC1TSMB	1/8"	NC4TSMB	1/2"
NC2TSMB	1/4"	NC6TSMB	3/4"
NC3TSMB	3/8"	NC8TSMB	1"

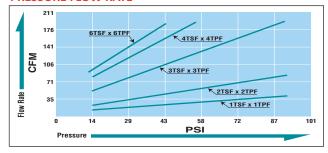
For male thread connection (TSF)



MODEL	APPLICATION	MODEL	APPLICATION
NC1TSFB	1/8"	NC4TSFB	1/2"
NC2TSFB	1/4"	NC6TSFB	3/4"
NC3TSFB	3/8"	NC8TSFB	1"

Also available in BRASS and STAINLESS STEEL

PRESSURE FLOW RATE



SPECIFICATIONS

Body Material	BRASS		STAINLESS	STEEL/STEEL
Size	1/8" 1/4" 3/8"	1/2" 3/4" 1"	1/8" 1/4" 3/8"	1/2" 3/4" 1"
Working Pressure MPa kgf/cm²	5.0 51	3.0 31	7.5 76	4.5 46
Pressure Resist. MPa kgf/cm²	7.5 76	4.5 46	10.0 102	6.5 66
Seal Material			Nitrile	rubber (NBR)
Working Temperature				-20°C ~ +80°C

PLUG

For hose connection (TPH)



MODEL	APPLICATION	MODEL	APPLICATION
NC1TPHB	For 1/8" hose	NC4TPHB	For 1/2" hose
NC2TPHB	For 1/4" hose	NC6TPHB	For 3/4" hose
NC3TPHB	For 3/8" hose	NC8TPHB	For 1" hose

For female thread connection (TPM)



MODEL	APPLICATION	MODEL	APPLICATION
NC1TPMB	1/8"	NC4TPMB	1/2"
NC2TPMB	1/4"	NC6TPMB	3/4"
NC3TPMB	3/8"	NC8TPMB	1"



MODEL	APPLICATION	MODEL	APPLICATION
NC1TPFB	1/8"	NC4TPFB	1/2"
NC2TPFB	1/4"	NC6TPFB	3/4"
NC3TPFB	3/8"	NC8TPFB	1"



MINI CUPLA OXYGEN/ACETYLENE

FOR USE ON EQUIPMENT FOR WELDING AND GAS CUTTING

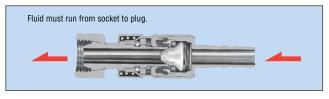
Many variations with higher flow rates.



FEATURES

- From cylinder to torch, all piping connections associated with oxygen/acetylene equipment are now in push to connect configuration.
- Double lip prevents minor leaks during connection.
- Oxygen and fuel gas couplings have different sizes to prevent accidental inter-connection.

FLUID FLOW DIRECTION



SOCKET

For hose connection (SH)



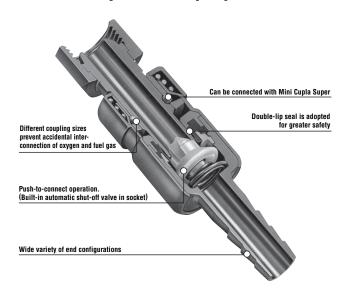
MODEL	USAGE	APPLICATION
NC22SH	Oxygen	1/4"
NC33SH	Fuel Gas	3/8"

For male thread connection (SF)



MODEL	USAGE	APPLICATION
NC22SF	Oxygen	1/4"
NC33SF	Fuel Gas	3/8"

Exclusively for oxygen/ acetylene equipment!



SPECIFICATIONS

Body Material		Brass
Size	• 1/4" (22 type) • 3/8" (33 type)
Working Pressure	100 PSI	0.7 MPa (7 kgf/cm²)
Pressure Resistance	145 PSI	1.0 MPa (10 kgf/cm²)
Seal Material		Nitrile rubber (NBR)
Working Temperature		-20°C ~ +80°C

PLUG

For hose connection (PH)



MODEL	USAGE	APPLICATION
NC22PH	Oxygen	1/4"
NC33PH	Fuel Gas	3/8"



MODEL	USAGE	APPLICATION
NC22PF	Oxygen	1/4"
NC33PF	Fuel Gas	3/8"



GENERAL PURPOSE AND MOLD COOLANT PORT COUPLING

Designed for quick replacement for die and mold! Rust resistant models having many variations.

FEATURES

- Space saving design for molds with closely spaced coolant ports.
- Long sleeve socket facilitates connection/disconnection with plug embedded in mold.
- Enables quick mold coolant hose connection/disconnection.

SPECIFICATIONS

Body Material		Brass
Size		• 1/8" • 1/4" • 3/8"
Working Pressure	145 PSI	1.0 MPa (10 kgf/cm²)
Pressure Resistance	215 PSI	1.5 MPa (15 kgf/cm²)
Seal Material		Nitrile rubber (NBR)
Working Temperature		-20°C ~ +80°C

SOCKET

For hose connection (SH)



MODEL	APPLICATION
NCK02SH	For 1/4" hose
NCK03SH	For 3/8" hose

For female thread connection (SM)



MODEL	APPLICATION
NCK02SM	1/4"
NCK03SM	3/8"

For male thread connection (SF)



MODEL	APPLICATION
NCK02SF	1/4"

For hose connection (SHL)



MODEL	APPLICATION
NCK02SHL	1/8"
NCK03SHL	1/4"



INTERCHANGEABILITY

Sockets and plugs can be connected regardless of end configurations and sizes. Can be connected to Super Cupla.

Flow Meter available - NCFM03A

PLUG

For hose connection (PH)



MODEL	APPLICATION
NCK02PH	For 1/4" hose
NCK03PH	For 3/8" hose

For female thread connection (PM)



MODEL	APPLICATION
NCK01PM	1/8"
NCK02PM	1/4"
NCK03PM	3/8"

For male thread connection (PF)



MODEL	APPLICATION
NCK02PF	1/8"
NCK02PF	1/4"
	., .
NCK03PF	3/8"



MODEL	APPLICATION
NCK01PML	1/8"
NCK02PML	1/4"
NCK03PML	3/8"



For Inert Gas, Vacuum

SP-V Cupla

For vacuum













For Air

Cube Cupla

Small and lightweight coupling for air supply lines to medical and/or scientific equipment



















Automatic shut-off valves in both socket and plug for vacuum applications.



Both socket and plug have built-in valve types and valveless types. Simple one action for connection or disconnection.

Lightweight plastic coupling.

Nitto Kohki's vast experience, extending over the development of 3,000 series and 25,000 types is brought to life in a multitude of different patented technologies.

- Applications diversify from general household to high-tech industries such as in oceanic and space development.
- Diameters range from a tiny 1mm to a huge 540mm.
- Bodies of steel, brass, plastic, aluminium & stainless steel.
- CUPLA is the world brand that answers all user needs in all industries.



