



# NCI 33 Temperature control





# Modular design for customised solutions





# Give added value to the distribution function



**Built-in sealing** 

- sealing between each module: O ring seal.
- sealing between the modules and the connections: all the connections are either fitted with a seal, or PTFE pre-applied. You save time and eliminate the risks of pollution of the circuits by the addition of a sealing product.
- internal connection sealing: all Stäubli solutions benefit from more than 50 years experience in energy connections and designs dedicated to sealing.



### **Swivelling modules**

- a simple screw action allows the system to be loosened and the modules turned.
- sealing is maintained during manipulation: it is not necessary to drain the system beforehand.
- **position indexes** every 30° show the angles of the modules.



## **Circuit identification**

- coloured rings, red or blue, provide simple and quick identification of the hot / cold fluid circuits.
- rationalisation of your circuits considerably simplifies the use of your regulation systems: compactness, accessibility, identification, streamlining, etc.



#### Principle of use:

In temperature control, the manifolds are used in pairs: one at the inlet, the other at the outlet.

They can be used mounted vertically or horizontally and can be stacked on each other.

For easier integration into your installations, we can supply the 2D or 3D files of the manifold with its fittings.





#### **Technical characteristics**

	NCI 33
Working pressure (bars)	10
Working temperature (°C) The temperatures depend on the shutoff type of the connectings equipping the manifold:	
with full flow couplings or threaded plugs	+5° to +90°
only with shutoff couplings RPL 08 ON other versions	+5° to +90° +5° to +200°
Manifold inlet/outlet	G 1 1/4
Construction of the bare manifold body seals	brass fluorocarbon

For all other usage conditions: please contact us.



# **Define your solution**

Firstly, compose the reference of the bare manifold (cf below).

Secondly, select the references of the connections with which you wish to equip it (cf pages 6 to 7).

#### Reference of the bare manifold

NCI 33	module threads		number of modules	ring colour		type of inlet/outlet	
Characteristics	G 3/8	G 1/2	from 2 to 16	red	blue	axial	radial
Associated codes	1102	1103	/x	/KR	/KB	standard	/RE

For all other configurations: please contact us



The manifold reference is built up on the basis of:

- a the module outlet threading
- c the colour of the rings
- b the number of modules
- d the type of inlet/outlet

#### **Exemple** of a manifold with:

8 modules G 3/8, red ring and radial inlet, the reference will be: NCI 33.1102/08/KR/RE

# Size of the bare manifolds



Manifold with axial inlet/outlet

2 to 8 modules









		Number of modules						
		2	3	4	5	6	7	8
Size of <b>axial</b> version	E (mm)	186	225	263	301	340	378	416
Size of <b>radial</b> version	E (mm)	240	279	317	356	394	432	471



To ensure the strength of the system, an intermediate plate is added if the number of modules exceeds 8

9 to 16 modules



#### Manifold with axial inlet/outlet



#### Manifold with radial inlet/outlet



		Number of modules							
		9	10	11	12	13	14	15	16
Size of <b>axial</b> version	E (mm)	482	520	558	596	635	673	711	750
Size of <b>radial</b> version	E (mm)	536	574	612	651	689	727	766	804



#### **Quick couplings**

SOCKETS	passage diameter (mm)	max. working temperature* (°C)	seal	Part numbers
Full flow, GPL socket with nitrile seal providing the connection sealing.	25	+90°	nitrile	GPL 25.1156
	33	+90°	nitrile	GPL 33.1156
With shutoff, RMI socket with fluorocarbon seal providing the connection sealing.	05	.200%	flueroorken	Blue ring RMI 25.1156/JV/KB
	25	+200	nuorocarbon	Red ring RMI 25.1156/JV/KR

CONNECTING PLUG	passage diameter (mm)	max. working temperature* (°C)	seal	Part numbers
Full flow, GPL plug with nitrile seal providing the connection sealing.	25	+90°	-	GPL 25.6156
	33	+90°	-	GPL 33.6156
With shutoff, RMI plug with fluorocarbon seal providing the connection sealing.	25	.000%	fluerreendeer	Blue ring RMI 25.7156/JV/KB
	25	+200	nuorocarbon	Red ring RMI 25.7156/JV/KR

#### Solution with a threaded plug

	hose inside diameter (mm)	max. working temperature* (°C)	seal	Part numbers
Nickel plated brass threaded plugs with nitrile seal providing the connection sealing.	38	+90°	-	AF 156.38/LN

#### To prevent connection errors:

- provide mechanical foolproofing between your inlet manifold and your outlet manifold by fitting one with a socket and the other with a connecting plug.
- make a visual identification of the cold or hot fluid circuits using the coloured rings on the manifold and the couplings.

Hose side: find all the quick connection solutions in our **GPL and RMI** brochures.



#### **Quick couplings**

	passage max. working		Part numbers		
NPL SUCKETS	(mm)	(°C)	Sedi	for G 3/8 modules	for G 1/2 modules
Full flow, male thread, with PTFE pre-applied providing the connection sealing	08	1 QO°	_	Blue ring RPL 08.1152/KB	_
the connection sealing.	08	+90	-	Red ring RPL 08.1152/KR	-
1111 <b>5</b>	10	100°		_	Blue ring RPL 12.1153/KB
	12	+90°	-	-	Red ring RPL 12.1153/KR
With flow controller, with nitrile seal providing the connection	09	. 00°	pitrilo	Blue ring RPL 08.1152/DR/KB	
	08	+90	Thune	Red ring RPL 08.1152/DR/KR	-
	12	+90°	nitrile		Blue ring RPL 12.1153/DR/KB
				-	Red ring RPL 12.1153/DR/KR
With shutoff, male thread, with PTFE pre-applied providing the connection sealing.	09	. 00°	fluorooorboo	Blue ring RPL 08.1152/ON/JV/KB	
	08	+90°	fluorocarbon	Red ring RPL 08.1152/ON/JV/KR	-

	passage	max. working		Part nu	umbers
CONNECTING PLUG	diameter (mm)	eter temperature* seal m) (°C)		for G 3/8 modules	for G 1/2 modules
With shutoff, RMI BSP male thread with 60° cone and fluorocarbon seal providing the connection sealing.	09	+200°	fluorocarbon	RMI 09.7152/JV	-
	12	+200°	fluorocarbon	-	RMI 12.7153/JV
Flush face, CBI BSP male thread with 60° cone and fluorocarbon seal	06	+200°	fluorocarbon	CBI 06.7152/IA/JV	-
providing the connection sealing.	09	+200°	fluorocarbon	CBI 09.7152/IA/JV	_
	12	+200°	fluorocarbon	-	CBI 12.7153/IA/JV

Hose side: find all the quick connection solutions in our **our RPL, RMI and CBI** brochures.



#### Solutions with threaded plugs

	hose inside diameter	max. working	Part numbers			
INNEADED PLOUS	(mm)	temperature* (°C)	for G 3/8 modules	for G 1/2 modules		
Nickel plated brass threaded plugs with nitrile seal providing the connection sealing.	10	+90°	AF 152.10/LN	-		
	12	+90°	-	AF 153.12/LN		
	16	+90°	-	AF 153.16/LN		
<b>Ringed profile threaded plugs</b> with nitrile seal providing the connection sealing.	10	+90°	AF 152.10/CN	AF 153.10/CN		
	13	+90°	AF 152.13/CN	AF 153.13/CN		
	16	+90°	AF 152.16/CN	AF 153.16/CN		



#### Solutions with elbows

SWIVELLING ELBOW	thread F	max. working temperature* (°C)	Part numbers for G 1/2 modules
Male threaded 90° elbow, with fluorocarbon seal providing the connection sealing.	Female G 3/8	+200°	RMF 153.102/REO/LN/JV
	Female G 1/2	+200°	RMF 153.103/REO/LN/JV

#### Accessory

CAD	max. working	Part numbers			
VAF	temperature* (°C)	for G 3/8 modules	for G 1/2 modules		
AISI 316 L stainless cap, with fluorocarbon seal providing the connection sealing.	+200°	BOU 152/IC/JV	BOU 153/IC/JV		

\*To determine the max. operating temperature of the equipped manifold, it is necessary to take into account of the max. working temperature of all the connectings equipping the NCI.

For contact details: www.staubli.com/connectors/contacts



#### Global presence of the Stäubli Group

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