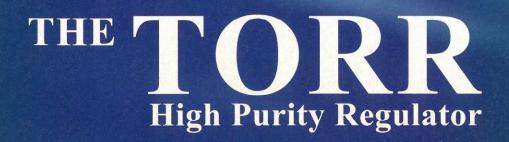
TANAKA



MODEL LINE-UP

TORR

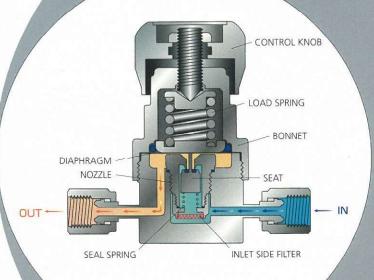
A variety of models from high pressure to very low pressure, and from low flow rate to high flow rate, are available as standard models for semiconductor and LCD gases.

Models applying high-corrosion-resistance alloy, Ni-Cr-Mo alloy (Hastelloy) to primary metallic parts contacting with gas are available for use in corrosive gases.

S-TORR

This is a model for super high-purity gas piping use, securing gas purity retaining performance and safety to the utmost limit. Models for special uses are available, such as models for strong corrosive gas, negative pressure control, and tied diaphragm type.

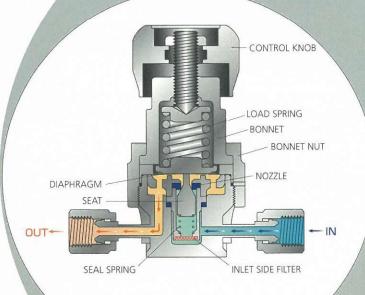
TORR Regulator Purity



Features of TORR

- Assembly work for all of products is done in the clean rooms of 0.3µm class 1000.
- A variety of products from high pressure to very low pressure and from low to high flow rates are available.
- He-leak testing is applied to the products.
- Products of polished specification are available.
- Products having high-pressure gas application approval can be produced

S-TORR Regulator Ultra High Purity



Features of S-TORR

- Assembly work is done for all of products in 0.1µm class 10 clean rooms.
- Connections are all welded (body and fittings) and metal seals are employed to reduce external leaks.
- He-leak testing is applied to the products.
- Polished finishing specification is employed as standard for metallic parts contacting gas.
- Products having high-pressure gas application approval can be produced.

TORR-1300 SERIES



Typical Application Cylinder Cabinet Pressure Regulator Semiconductor Manufacturing

Standard model for inlet high-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc SH series for corrosive gas use

Single stage standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

SH series

Surface finish

Leakage

Operating temperature

150Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

80 slpm (at 2Kg/cm²)

250 slpm (at 10Kg/cm²)

Stainless steel 316L

PCTFE

Stainless steel 316L

Stainless steel 316L

Ni-Cr-Mo alloy %Hastelloy (Diaphragm, Nozzle)

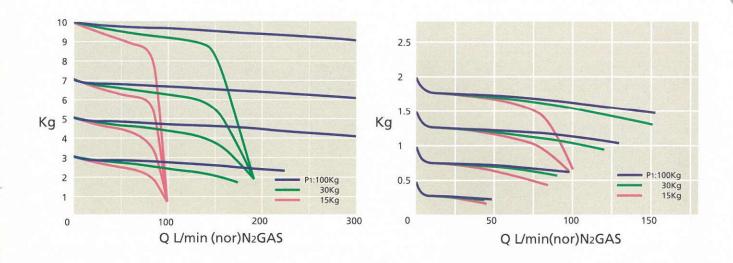
Standard

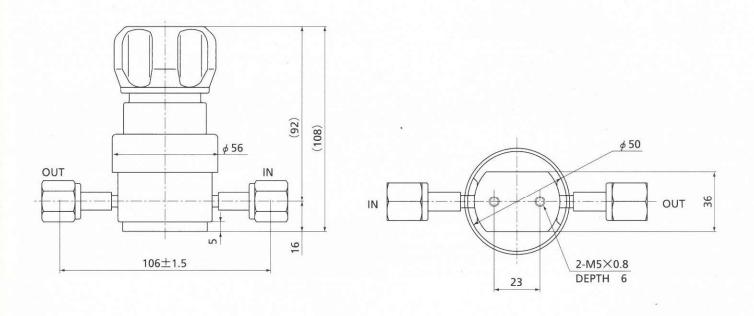
Ra \leq 0.7 μ m

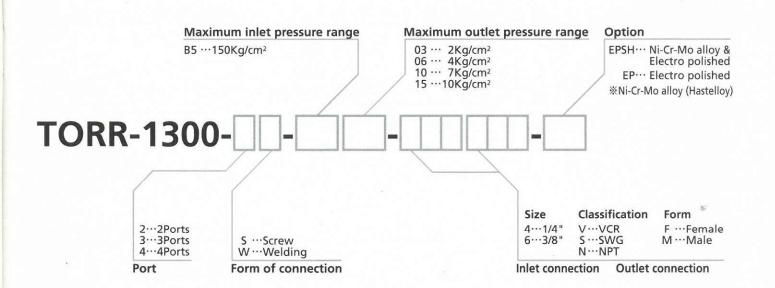
Electro polished R

Ra≦0.25 μ m

1.3×10⁻¹⁰ Pa • m³/sec







TORR-2300 SERIES



Typical Application 1/4", 3/8",1/2" Cylinder Cabinet Pressure Regulator Semiconductor Manufacturing

Standard model for inlet high-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc SH series for corrosive gas use

Single stage hi-flow standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

SH series

Surface finish

Leakage

Operating temperature

210Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

200 slpm (at 2Kg/cm²)

400 slpm (at 10Kg/cm²)

Stainless steel 316L

PCTFE

Stainless steel 316L

Stainless steel 316L

Ni-Cr-Mo alloy **Hastelloy (Diaphragm, Nozzle)

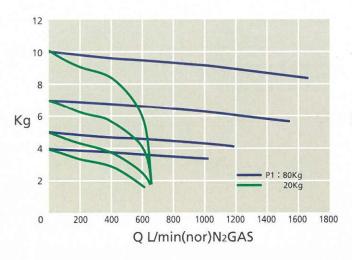
Standard

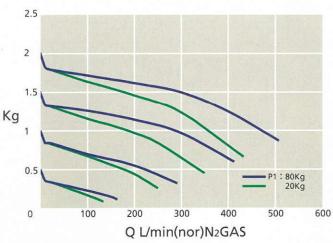
Ra≦0.7 μ m

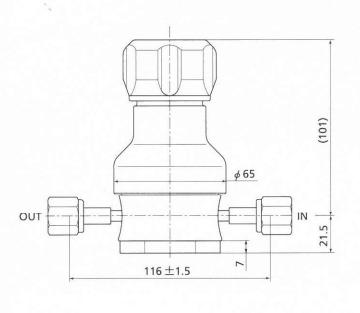
Electro polished

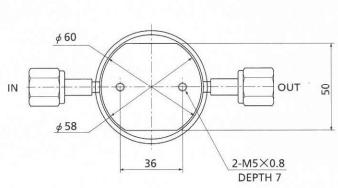
Ra≤0.25 μm

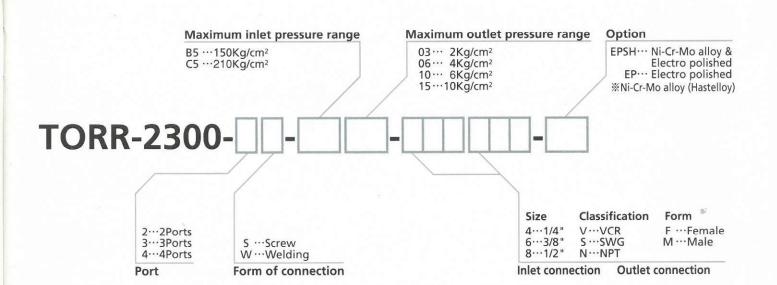
1.3 × 10-10 Pa • m3/sec











S-TORRV-1300 SERIES



Typical Application 1/4" Cylinder Cabinet Pressure Regulator Semiconductor Manufacturing

Standard model for inlet high-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc

Single stage standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Nozzle

Diaphragm

Spring, Seat, Stem

Surface finish

Leakage

Operating temperature

150Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

40 slpm (at 2Kg/cm²)

80 slpm (at 10Kg/cm²)

Stainless steel 316L

PCTFE

Stainless steel 316L

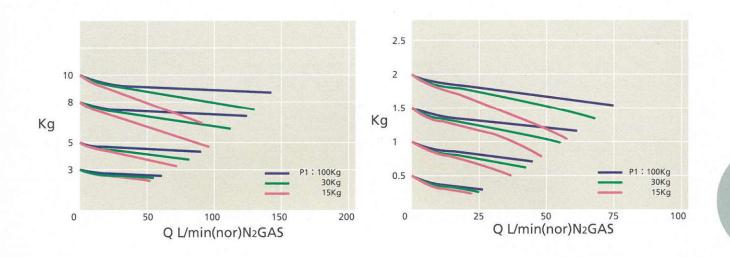
Stainless steel 316L

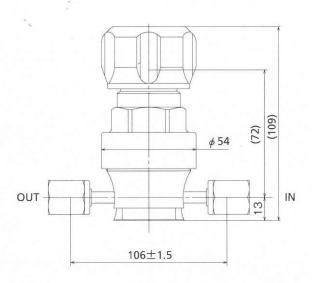
Electro polished Ra≤0.25 μm

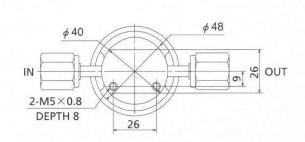
Option

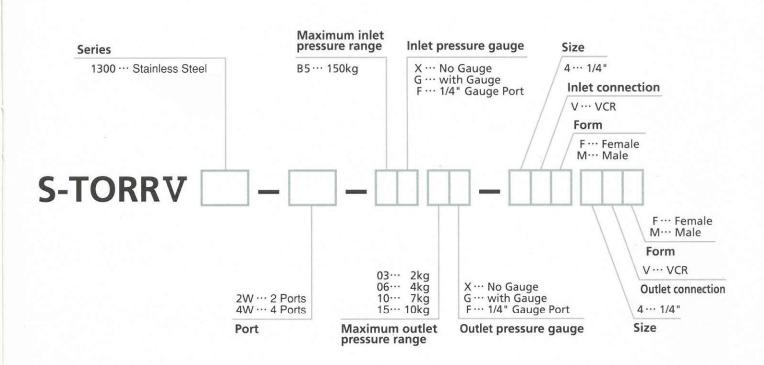
Ra≦0.1 μ m

1.3×10-11 Pa • m³/sec









S-TORRV-2300 SERIES



Typical Application 1/4",3/8" Cylinder Cabinet Pressure Regulator Semiconductor Manufacturing

Standard model for inlet high-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc

Single stage hi-flow standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Nozzle

Diaphragm

Spring, Seat, Stem

Surface finish

Leakage

Operating temperature

150Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

100 slpm (at 2Kg/cm²)

400 slpm (at 10Kg/cm²)

Stainless steel 316L

PCTFE

Stainless steel 316L

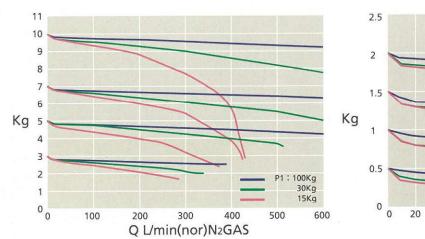
Stainless steel 316L

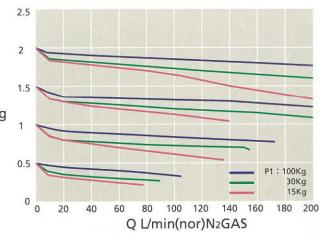
Electro polished Ra≤0.25 μm

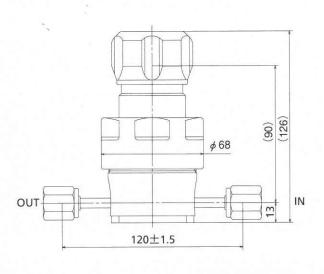
%Option

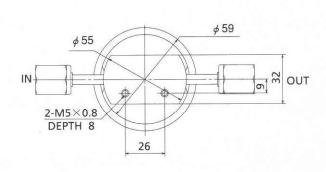
Ra≦0.1 μ m

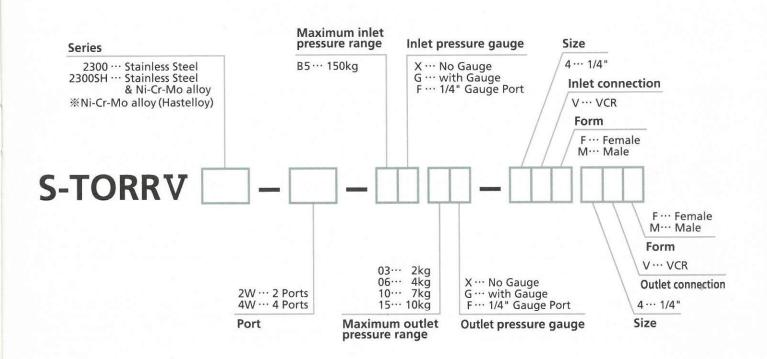
1.3 X 10-11 Pa • m³/sec











Point of Use Pressure Regulator

TORR-30 SERIES



Typical Application 1/4",3/8" Point of Use Pressure Regulator Semiconductor Manufacturing

Standard model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc SH series for corrosive gas use

Single stage standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

SH series

Surface finish

Leakage

Operating temperature

50Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

100 slpm (at 2Kg/cm²)

300 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

Stainless steel 316L

Stainless steel 316L

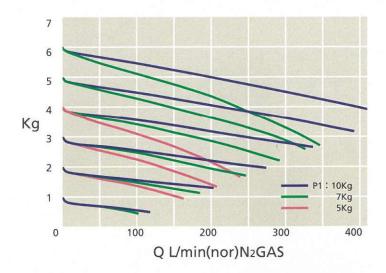
Ni-Cr-Mo alloy **Hastelloy (Diaphragm, Nozzle)

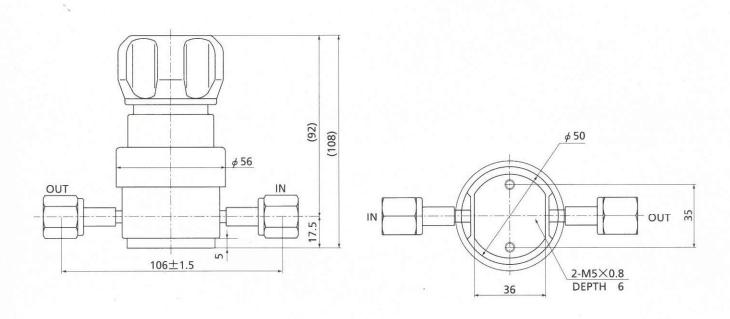
Standard

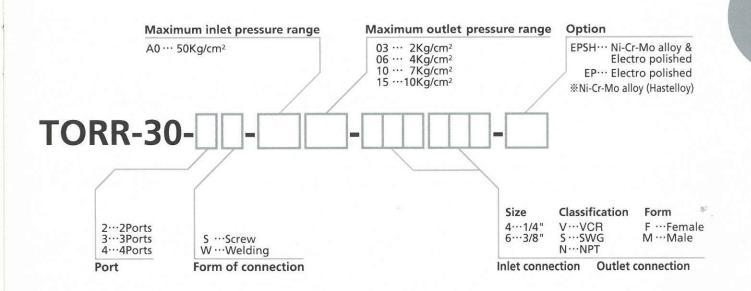
Ra \leq 0.7 μ m

Electro polished Ra≤0.25 μm

1.3 × 10-10 Pa • m³/sec







Point of Use Pressure Regulator

TORR-50 SERIES



Typical Application 1/2" Point of Use Pressure Regulator Semiconductor Manufacturing

Standard model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc

Single stage hi-flow standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Surface finish

Leakage

Operating temperature

35Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

300 slpm (at 2Kg/cm²)

550 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

Stainless steel 316L

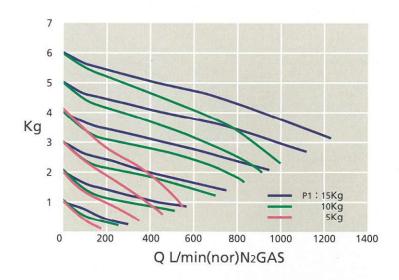
Stainless steel 316L

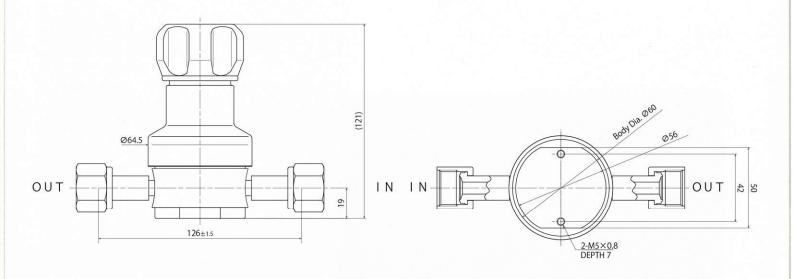
Standard

Ra≦0.7 μ m

Electro polished Ra≤0.25 μm

1.3 X 10-9 Pa • m³/sec





Example of specification combination/ TORR-50 Series.

Gauge & Gauge Port for Inlet (P1)	Gauge & Gauge Port for Outlet(P2)	Connection for Inlet / Outlet	Surface finish	Port	Remark	
Nothing	Nothing Nothing		Standard	2 Ports	P1(Max)=35kg, P2(Max)=10kg	
Nothing	Nothing Gauge Port of 1/4"F-NPT	1/2" F-NPT	Standard	3 Ports	P1(Max)=35kg, P2(Max)=10kg	
Nothing	Nothing	1/2" SWG (3/8"×1/2"Connect.)	Standard	2 Ports	P1(Max)=35kg, P2(Max)=10kg	
Nothing	C1.1KP **C1.1KP = 11kg/160psi	1/2" SWG (3/8"×1/2"Connect.)	Standard	3 Ports	P1(Max)=35kg, P2(Max)=7kg	
Nothing	Nothing	1/2" F-VCR (1/2"×1/2"Gland)	Standard	2 Ports	P1(Max)=35kg, P2(Max)=10kg End to End = 126±1.5mm	
Nothing	C1.1KP *C1.1KP = 11kg/160psi	1/2" F-VCR (1/2"×1/2"Gland)	Electro polished	3 Ports	P1(Max)=35kg, P2(Max)=10kg End to End = 148±1.5mm	
Nothing	Nothing Gauge Port of 1/4"F-VCR Internal	1/2" F-VCR (1/2"×1/2"Gland)	Electro polished	3 Ports	P1(Max)=35kg, P2(Max)= 7kg End to End = 148±1.5mm	

Point of Use Pressure Regulator
Hi-Flow
TORR-80 SERIES



Typical Application 3/4" Point of Use Pressure Regulator Semiconductor Manufacturing

Hi-flow model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc

Single stage hi-Flow standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Surface finish

Leakage

Operating temperature

20Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

600 slpm (at 2Kg/cm²)

1200 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

Stainless steel 316L

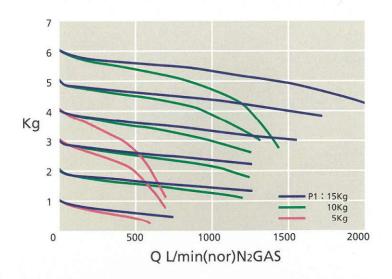
Stainless steel 316L

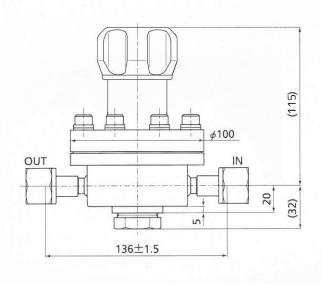
Standard

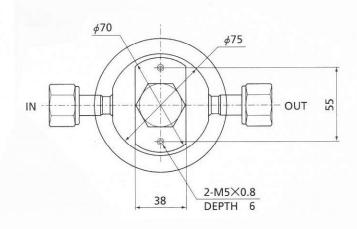
Ra≦0.7 μ m

Electro polished Ra≤0.25 μm

1.3 X 10-9 Pa • m³/sec







Example of specification combination/TORR-80 Series.

Gauge & Gauge Port for Inlet (P1)			Surface finish	Port	Remark	
Nothing	Nothing	3/4" SWG (1/2"×3/4"Connect.)	Ctandard		P1(Max)=20kg, P2(Max)=10kg	
Nothing	Nothing	3/4" SWG (3/4"×3/4"Connect.)	Standard	2 Ports	P1(Max)=20kg, P2(Max)=10kg	
Nothing	C1.5KP **C1.5KP = 15kg/210psi	3/4" SWG (3/4"×3/4"Connect.) Standard		3 Ports	P1(Max)=20kg, P2(Max)=10kg	
Nothing	C1.1KP **C1.1KP = 10kg/160psi	3/4" F-NPT	Standard	3 Ports	P1(Max)=20kg, P2(Max)= 7kg	
Nothing	Nothing	3/4" F-VCR (3/4"×3/4"Gland)	Standard	2 Ports	P1(Max)=20kg, P2(Max)=10kg End to End = 151±1.5mm	
Nothing	Nothing	3/4" F-VCR (3/4"×3/4"Gland)	Electro polished	2 Ports	P1(Max)=20kg, P2(Max)=10kg End to End = 180±1.5mm	
Nothing	C1.5KP **C1.5KP = 15kg/210psi	3/4" F-VCR (3/4"×3/4"Gland)	Electro polished	3 Ports	P1(Max)=20kg, P2(Max)=10kg End to End = 180±1.5mm	

Point of Use Pressure Regulator Hi-Flow

TORR-150 SERIES



Typical Application
3/4",1" Point of Use Pressure Regulator
Semiconductor Manufacturing

Standard model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc

Single stage ultra hi-flow standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Surface finish

Leakage

Operating temperature

20Kg/cm²

0 to 2, 0 to 4, 0 to 7, 0 to 10Kg/cm²

1000 slpm (at 2Kg/cm²)

2000 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

Stainless steel 316L

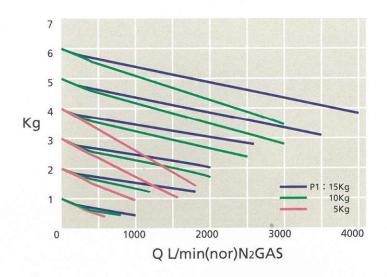
Stainless steel 316L

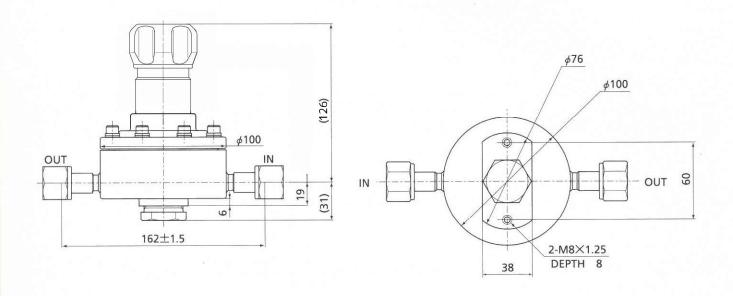
Standard

 $Ra \leq 0.7 \mu m$

Electro polished Ra≤0.25 μm

1.3 X 10-9 Pa • m³/sec





Example of specification combination/TORR-150 Series.

Gauge & Gauge Port for Inlet (P1)	Gauge & Gauge Port for Outlet(P2)	Connection for Inlet / Outlet	Surface finish	Port	Remark P1(Max)=20kg, P2(Max)=10kg	
Nothing	Nothing	3/4" SWG (3/4" × 3/4" Connect.)	Standard	2 Ports		
Nothing	C1.1KP **C1.1KP = 11kg/160psi	3/4" SWG (3/4" × 3/4" Connect.)	Standard	3 Ports	P1(Max)=20kg, P2(Max)= 71	
Nothing	Nothing	1" SWG (3/4"×1"Connect.)	Standard	2 Ports	P1(Max)=20kg, P2(Max)=10kg	
Nothing	Nothing	3/4" F-VCR (3/4" × 3/4" Gland)	Standard	2 Ports	P1(Max)=20kg, P2(Max)=10kg End to End = 198±1.5mm	
Nothing	C1.1KP **C1.1KP = 11kg/160psi	3/4" F-VCR (3/4"×3/4"Gland)	Standard	3 Ports	P1(Max)=20kg, P2(Max)= 7kg End to End = 198±1.5mm	
Nothing	Nothing	1" F-VCR (3/4"×1"Gland)	Standard	2 Ports	P1(Max)=20kg, P2(Max)=10kg	
Nothing	Nothing	1" F-VCR (3/4"×1"Gland)	Electro polished	2 Ports	P1(Max)=20kg, P2(Max)=10kg	

Point of Use Pressure Regulator Hi-Flow

TORR-350 SERIES



Typical Application Semiconductor Manufacturing

Standard model for inlet low-pressure gases for like of N₂ gas

Single stage ultra hi-flow model Stainless steel 316 regulator

SPECIFICATIONS

Maximum inlet pressure
Outlet pressure ranges
Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Leakage

Operating temperature

15Kg/cm²

0 to 2, 0 to 4, 0 to 7 Kg/cm²

1700 slpm (at 2Kg/cm²)

3300 slpm (at 6Kg/cm²)

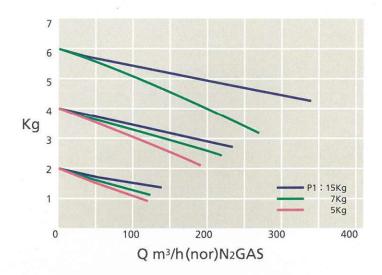
Stainless steel 316L

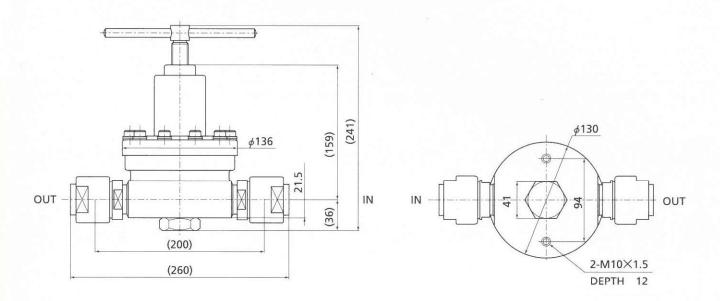
PTFE

FKM + PTFE

Stainless steel 316L

1.3 × 10-9 Pa • m³/sec





Example of specification combination/TORR-350 Series.

Gauge & Gauge Port for Inlet (P1)	Gauge & Gauge Port for Outlet(P2)	Connection for Inlet / Outlet	Surface finish	Port	Remark P1(Max)=15kg, P2(Max)= 7kg End to End = (285)	
Nothing	Nothing	JIS 10K 40A Flange	Standard	2 Ports		
Nothing	Nothing	JIS 10K 32A Flange	Standard	2 Ports	P1(Max)=15kg, P2(Max)= 7kg End to End = 286±1.5mm	
Nothing	Nothing	JIS 10K 25A Flange	Standard	2 Ports	P1(Max)=15kg, P2(Max)= 7kg End to End = 286±1.5mm	
Nothing	Nothing	32A Welding Socket	Standard	2 Ports	P1(Max)=15kg, P2(Max)= 7kg End to End = (280)	
Nothing	C1.1KP **C1.1KP = 11kg/160psi		Standard	3 Ports	P1(Max)=15kg, P2(Max)= 7kg End to End = (285)	

Point of Use Pressure Regulator

S-TORRV-30 SERIES



Typical Application 1/4" Point of Use Pressure Regulator Semiconductor Manufacturing

Standard model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc SH series for corrosive gas use

Single stage standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure
Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Nozzle

Diaphragm

Spring, Seat, Stem

SH series

Surface finish

Leakage

Operating temperature

15Kg/cm²

0 to 2, 0 to 4, 0 to 7Kg/cm²

50 slpm (at 2Kg/cm²)

100 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

Stainless steel 316L

Stainless steel 316L

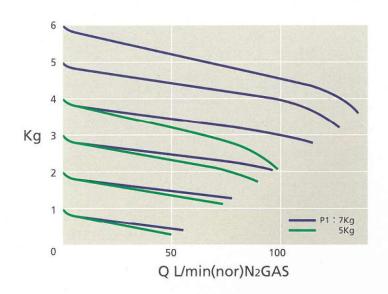
Ni-Cr-Mo alloy %Hastelloy (Diaphragm, Nozzle)

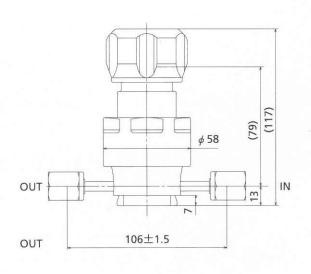
Electro polished Ra \leq 0.25 μ m

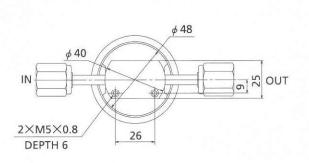
Option

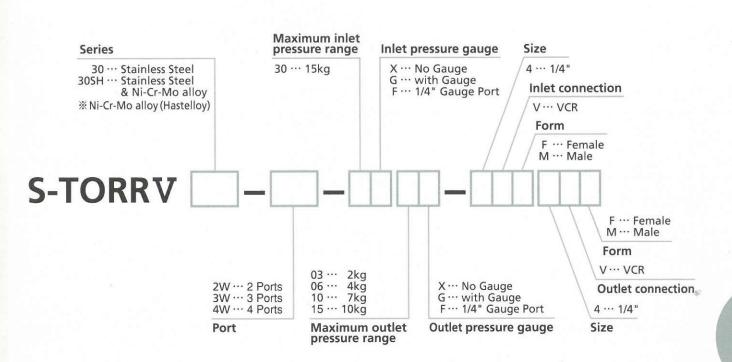
 $Ra \leq 0.1 \,\mu\,\text{m}$

1.3 X 10-11 Pa • m³/sec









Point of Use Pressure Regulator

S-TORRV-50 SERIES



Typical Application 3/8", 1/2" Point of Use Pressure Regulator Semiconductor Manufacturing

Standard model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc SH series for corrosive gas use

Single stage hi-flow standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Nozzle

Diaphragm

Spring, Seat, Stem

SH series

Surface finish

Leakage

Operating temperature

15Kg/cm²

0 to 2, 0 to 4, 0 to 7Kg/cm²

200 slpm (at 2Kg/cm²)

400 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

Stainless steel 316L

Stainless steel 316L

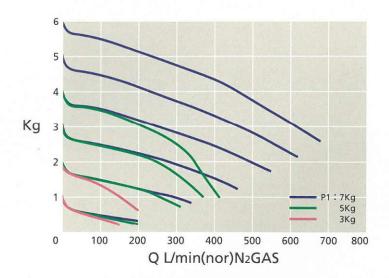
Ni-Cr-Mo alloy **Hastelloy (Diaphragm, Nozzle)

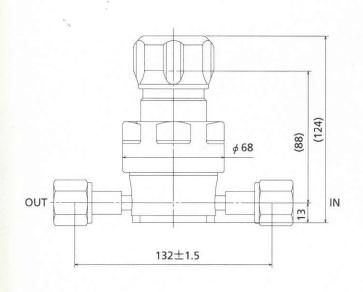
Electro polished Ra≤0.25 μm

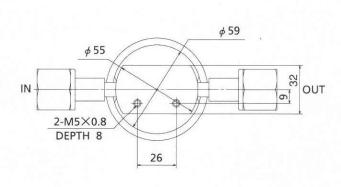
Option

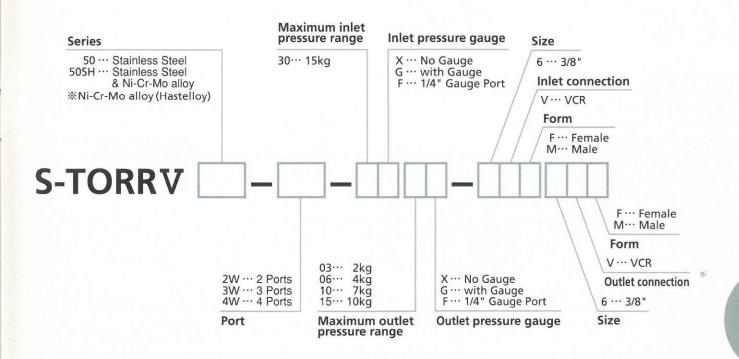
Ra≦0.1 μ m

1.3 X 10-11 Pa • m3/sec









S-TORRV-A10 SERIES



Typical Application
1/4" Point of Use Pressure Regulator
Cylinder Cabinet Vacuum Pressure Regulator

Standard model for inlet low-pressure gases For non corrosive gases unlike SiH₄,PH₃ etc SH series for corrosive gas use

Tied diaphragm standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Nozzle

Diaphragm

Spring, Seat, Stem

SH series

Finish

Leakage

Operating temperature

10Kg/cm²

Vacuum to 2Kg/cm²

Standard to 5 slpm (at 2Kg/cm²)

Stainless steel 316L

PTFE (Standerd)

Optional / PVDF , PFA , PCTFE

Stainless steel 316L

Stainless steel 316L

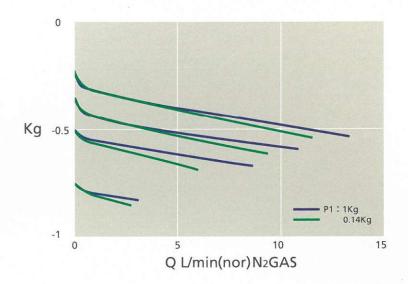
Ni-Cr-Mo alloy %Hastelloy (Diaphragm, Nozzle)

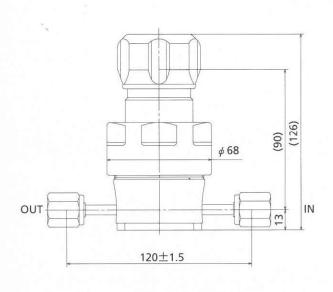
Electro polished Ra $\leq 0.25 \,\mu$ m

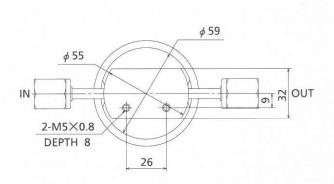
Option

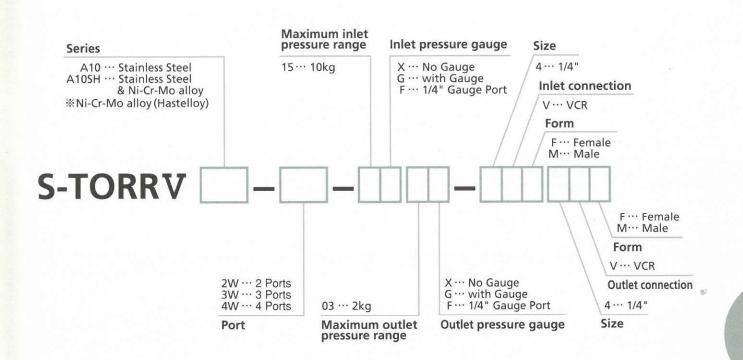
 $Ra \leq 0.1 \,\mu\,\text{m}$

1.3 X 10⁻¹¹ Pa • m³/sec









Hi-Pressure Regulator

TORR-H SERIES



Typical Application
1/4" Hi-Pressure Regulator
Semiconductor Manufacturing

Standard model for inlet high-pressure Gases for like of N₂ gas

hi-pressure standard model Stainless steel 316L regulator

SPECIFICATIONS

Maximum inlet pressure
Outlet pressure ranges
Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Surface finish

Leakage

Operating temperature

210Kg/cm²

0 to 30, 0 to 60, 0 to 120, 0 to 150Kg/cm²

250 slpm (at 30Kg/cm²)

500 slpm (at 60Kg/cm²)

Stainless steel 316L

PCTFE

Stainless steel 316L + FKM

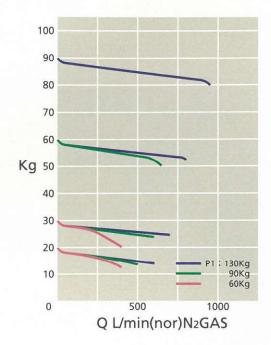
Stainless steel 316L

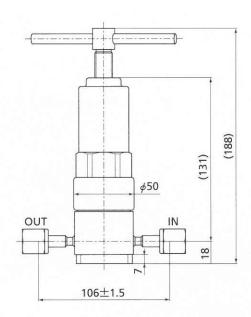
Standard

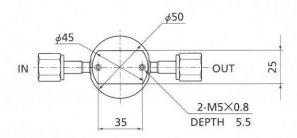
 $Ra \leq 0.7 \,\mu\,m$

Electro polished Ra $\leq 0.25 \,\mu$ m

1.3 X 10⁻⁸ Pa • m³/sec







Example of specification combination/TORR-H Series.

Gauge & Gauge Port for Inlet (P1)	Gauge & Gauge Port for Outlet(P2)	Connection for Inlet / Outlet	Surface finish	Port	Remark	
Nothing	Nothing	3/8" F-VCR	Electro	4 Ports	P1(Max)=210kg, P2(Max)=30kg	
Gauge Port of 1/4"F-VCR	Gauge Port of 1/4"F-VCR	(3/8"×3/8"Gland)	Polished		End to End = 139±1.5mm	
P25KP	P10KP	1/4" F-VCR		4 Ports	P1(Max)=150k, P2(Max)=60kg	
**P25KP = 250kg/3500psi	**P10KP = 100kg/1400psi	(1/4"×1/4"Gland) Standard			End to End = 106±1.5mm	
Nothing Gauge Port of 1/4"F-VCR	Nothing Gauge Port of 1/4"F-VCR	1/4" F-VCR Electro Polished		4 Ports	P1(Max)=150kg, P2(Max)=60kg End to End = 106±1.5mm	
P25KP	P10KP	1/4" F-VCR	Electro	4 Ports	P1(Max)=150kg, P2(Max)=65kg	
**P25KP = 250kg/3500psi	**P10KP = 100kg/1400psi	(1/4"×1/4"Gland)	Polished		End to End = 110±1.5mm	
P25KP **P25KP = 250kg/3500psi	P20KP **P20KP = 200kg/2800psi	1/4" F-VCR (1/4"×1/4"Gland)	Standard	4 Ports	P1(Max)=150kg, P2(Max)=120kg End to End = 106±1.5mm	
P35KP	P20KP	1/4" F-VCR	Electro	4 Ports	P1(Max)=200kg, P2(Max)=120kg	
**P35KP = 350kg/5000psi	**P20KP = 200kg/2800psi	(1/4"×1/4"Gland)	polished		End to End = 106±1.5mm	
P25KP	P20KP	1/4" F-VCR	Electro	4 Ports	P1(Max)=150kg, P2(Max)=135kg	
**P25KP = 250kg/3500psi	**P20KP = 200kg/2800psi	(1/4"×1/4"Gland)	Polished		End to End = 110±1.5mm	

IGS Pressure Regulator

S-TORRV-02 SERIES



SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Leakage

Surface finish

Operating temperature

10Kg/cm²

0 to 4Kg/cm²

40 slpm (at 4Kg/cm²)

Stainless steel 316L

PTFF

Ni-Cr-Mo alloy

*****Hastelloy alloy

Stainless steel 316L

1.3×10⁻¹¹ Pa • m³/sec

Standard Ra≤0.25 µm

-5°C to 40°C

Ultra Hi-Flow Pressure Regulator

TORR-800M



SPECIFICATIONS

Maximum inlet pressure

Outlet pressure ranges

Flow rates

TORR-800G

TORR-800M

Materials in contact with media

Body

Seat

Diaphragm

Spring, Nozzle, Stem

Leakage

Operating temperature

10Kg/cm²

0 to 6Kg/cm²

4600 slpm (at 6Kg/cm²)

10000 slpm (at 6Kg/cm²)

Stainless steel 316L

PTFE

PTFF

Stainless steel 316L

1.3 × 10⁻⁴ Pa ⋅ m³/sec

Cylinder gas regulator selection table

Division	Gas Gas property			Gas	Filling pressure	Recommendable model				
	name	Flammable	Burn assisting	Poisonous	Corrosive	phase	(Vapor pressure)	S-TORR Series	TORR Series	
	O ₂		0			*	150kg	V 1300		
	N ₂					*	150kg			
	Ar					*	150kg		1300	
	H ₂	0				*	150kg			
General gas / rare gas	He	1				*	150kg			
	CO ₂					☆	(56 ~ 74kg)	V 2300	2300	
	Ne					*	75kg			
	Xe					*	23kg	V 1300	1300	
	Kr					*	50kg			
	B ₂ H ₆	0		0		*	75 ~ 150kg	V 1900		
	SiH4	0		0		*	40 ~ 70kg	V 1300	1300-W	
	РНз	0	NO PER	0		☆	(35kg)	V 2300	2300-W	
	GeH4	0		0		*	3kg	17.20	20.111	
	AsH₃	0		0		☆	(15kg)	V 30	30-W	
pecial high-pressure gas or the like	H₂Se	0		0		☆	4kg	V 50	50-W	
	Si ₂ H ₆	0		0		☆	(2.5 ~ 4.5kg)	*4	*4	
	NF ₃	0	0	0		*	85 ~ 108kg			
	BF₃	0		0	0	*	27 ~ 69kg	V 1300	1300-W-EPSH	
	PF ₃	0		0	0	*	49kg	V 2300	2300-W-EPSH	
	SiF ₄	0		0	0	*	37 ~ 49kg	V 2300-AH	2300-77-6735	
	CF4					*	59 ~ 147kg	V 1300	1	
	CHF₃					☆	(44kg)	V 2300	1300 / 2300	
	CH ₂ F ₂		0			☆	(30kg)			
	C ₂ F ₆					☆	(16kg)	V 2300	2300	
Fluorine series gas	C3F6					☆	(6~10kg)			
	C ₃ F ₈					☆	(7 ~ 10kg)	V 50	50	
	C4F6	0		0		☆	2kg	VA10		
	C ₄ F ₈					☆	$(2.7 \sim 4 \text{kg})$	V A10 / V 50	50	
	C ₅ F ₈			0		☆	(0.7 ~ 1.3kg)	V A10	- 2013 Table	
	СО	0		0		*	100kg		7	
	NO		0	0		*	100kg	V 1300	1300-W	
	F ₂		0	0	0	*	20 ~ 100kg	V 2300-AH		
	HF			0	0	☆	(0.8kg)	V A10		
	HCL			0	0	☆	(40 ~ 58kg)		1300-W-EPSH	
	HBr	(10.00)		0	0	☆	(22 ~ 31kg)	V 2300-AH		
	N ₂ O		0			☆	(50 ~ 71kg)			
Other semiconductor	SF ₆					☆	(21 ~ 30kg)	V 2300	2300	
material gas	NH₃	0		0		☆	$(7 \sim 12 \text{kg})$	V T50	50-W	
	Cl2		0	0	0	☆	(6~9kg)	V 2300-AH	50-W-EPSH	
	BCl₃			0	0	☆	$(0.3 \sim 1.1 \text{kg})$	V A10	30 17 21311	
	CIF ₃			0	0	☆	$(0.4 \sim 1.3 \text{kg})$	V A10	_	
	SiH ₂ Cl ₂	0		0	0	☆	$(0.6 \sim 1.5 \text{kg})$		_	
	SiCl ₄			0	0	☆	$(0.2 \sim 0.3 \text{kg})$	V A10	_	
	WF ₆	KI DAKE T		0	0	☆	$(0.05 \sim 0.36 \text{kg})$			

Gas phase / ★= Compressed gas ☆= Liquefied gas

As for details of vapor pressures, refer to the vapor pressure diagram or contact the gas manufacturer.

Check and confirm the pressure in case of mixed gas.
 The value of pressure represents one at 35 degrees Celsius for compressed gas and one (vapor pressure) at the ordinary temperature to close to 35 degrees Celsius for liquefied gas.

^{*1} Use two stage reductions depending upon use gas volume.

³² This is the electrolytic polished product in TORR series.
33 Recommendable of JIS-qualified one.

¾4 Use 1300 or 2300 series for high-pressure leak test with N₂ gas.



- The quality management system of INDUSTRIAL EQUIPMENT OPERATION DIVISION NAGANO FACTORY has been found to be in accordance with ISO 9001
- Scope of Product / Service
 Reg. No.:98QR 111
 Design and Manufacture of Nozzle, Torches,
 Pressure Regulators, Cylinder Cabinets as well as
 Instruments and Tubing for High Pressure Equipment



- The environmental management system of NISSAN TANAKA CORPORATION Saitama Site, Nagano Site, and TANAKA ENGINEERING SERVICE. CO.,LTD.

- and TANAKA ENGINEERING SERVICE. CO., LTD.
 has been found to be in accordance with ISO 14001
 Reg. No.:05ER · 553
 Activities Defined by Products, Processes or Services

 1. Manufacturing and After-sale Service of Laser Processing,
 Oxy-Fuel Cutting and Plasma Cutting Systems.

 2. Manufacturing of Gas Welding and Gas Cutting Apparatus.

 3. Manufacturing of Gas Control Products.

For more information: Please request THE TORR catalogue.



Read instruction manual thoroughly before use.

The items described herein, including without information, Series features, specifications, designs, availability, are subject to change NISSAN TANAKA CORPORATION and its subsidiaries at any time without notice.

Manufactured by:



NISSAN TANAKA CORPORATION

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