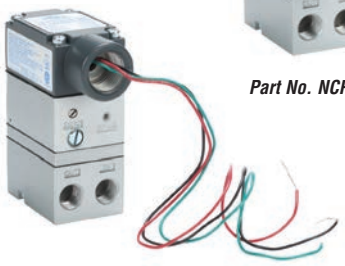
Electropneumatic Transducers (I/P)
NCP2 Series

Part No. NCP2-20-315D



Part No. NCP2-20-315N

See for a wide variety of fitting options

NITRA® NCP2 Series electropneumatic transducers (I/P) convert a 4-20 mA current signal(I) from a PLC or other controller to a linear pneumatic output pressure(P). Used in paper and paper converting, food and drug, petrochemical, HVAC, textile, and energy management industries, the NCP2 Series provides highly reliable and repeatable operation of pneumatic valve positioners, valve actuators, air cylinders, damper and louver actuators, web tensioners, clutches and brakes. The NCP2 Series is available in several output pressure ranges and includes an integral volume booster for high flow applications.

The NCP2 compact transducer housing is an excellent solution for space-constrained or high density panel installations and is NEMA 4X (IP65) rated for installation in NEMA 4X (IP65) environments. These transducers can be direct or bracket mounted and optional pipe and DIN rail mounting kits are also available. Models are offered with either a 1/2" NPT female conduit connection with wire leads or a field wireable DIN 43650 electrical connector. The NCP2 Series comes standard with Factory Mutual (FM) and CSA approval for intrinsically safe applications.

Features

- Compact transducer housing
- 4-20 mA input compatible with PLCs and other controllers
- Several output pressure ranges applicable for industrial pneumatic and process control applications
- Flexible pneumatic connection with input/output pressure ports on front and back
- Models with 1/2" NPT female conduit connection and wire leads or field wireable DIN 43650 electrical connector
- Direct or bracket mounting (bracket included)
- Optional pipe and DIN rail mounting kits available
- Zero and span adjustments
- Integrated volume booster
- Low air consumption
- FM and CSA Approved for Hazardous Locations
- Made in the USA

Made in the USA

NCP2 Series I/P Transducers						
Part Number	Price	Weight (lbs)	Input	Electrical Connection	Output Range	
					psig	bar
NCP2-20-315N		1.6	4-20 mA	1/2" female NPT with 12" wire leads	3-15	0.2-1.0
NCP2-20-327N		1.6	4-20 mA	1/2" female NPT with 12" wire leads	3-27	0.2-1.9
NCP2-20-630N		1.6	4-20 mA	1/2" female NPT with 12" wire leads	6-30	0.4-2.0
NCP2-20-260N		1.6	4-20 mA	1/2" female NPT with 12" wire leads	2-60*	0.14-4.0
NCP2-20-3120N		1.6	4-20 mA	1/2" female NPT with 12" wire leads	3-120*	0.2-8.0
NCP2-20-315D		2.5	4-20 mA	DIN 43650 Connector	3-15	0.2-1.0
NCP2-20-327D		2.5	4-20 mA	DIN 43650 Connector	3-27	0.2-1.9
NCP2-20-630D		2.5	4-20 mA	DIN 43650 Connector	6-30	0.4-2.0
NCP2-20-260D		2.5	4-20 mA	DIN 43650 Connector	2-60*	0.14-4.0
NCP2-20-3120D		2.5	4-20 mA	DIN 43650 Connector	3-120*	0.2-8.0

** Output shown is as calibrated at the factory. Large span adjustment capability allows recalibration to achieve output ranges of 3-35 psig (0.2-2.4 bar) with 2-60 psig unit or 3-145 psig (0.2-10 bar) with 3-120 psig unit.*

Electropneumatic Transducers (I/P)
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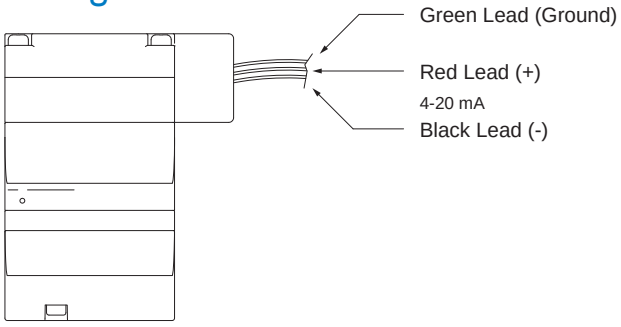
Part No.	NCP2-20-315N NCP2-20-315D	NCP2-20-327N NCP2-20-327D	NCP2-20-630N NCP2-20-630D	NCP2-20-260N NCP2-20-260D	NCP2-20-3120N NCP2-20-3120D
Functional Specifications					
Input	4-20 mA				
Outputs (psig - bar)	3-15 (0.2-1.0)	3-27 (0.2-1.8)	6-30 (0.4-2.0)	2-60 (0.14-4.0)	3-120 (0.2-8.0)
Supply Pressure (psig - bar)	20 min - 100 max (1.3 min - 6.7 max)	32 min - 100 max (2.1 min - 6.7 max)	35 min - 100 max (2.3 min - 6.7 max)	65 min - 150 max (4.3 min - 10.0 max)	125 min - 150 max (8.3 min - 10.0 max)
Air Consumption	0.03 scfm (0.9 NL/min) at mid range typical			0.07 scfm (2 NL/min) at mid range typical	
Flow Capacity	4.5 scfm (127 NL/min) at 25 psig (1.7 bar) supply pressure 12.0 scfm (340 NL/min) at 100 psig (6.9 bar) supply pressure			12.0 scfm (340 NL/min) at 100 psig (6.9 bar) supply pressure	20.0 scfm (566 NL/min) at 150 psig (10.0 bar) supply pressure
Relief Capacity	2 scfm (56.6 Nl/min) at 5 psig (2.4 bar) above 20 psig (1.3 bar) setpoint			7 scfm (198 Nl/min) at 10 psig (0.7 bar) above 20 psig (1.3 bar) setpoint	
Temperature Limits	-40°F to 158°F (-40°C to +70°C)				
Impedance	180 Ohms	240 Ohms	240 Ohms	245 Ohms	280 Ohms
Performance Specifications*					
Linearity	<± 0.5% of span			<± 2.0% of span	
Hysteresis and Repeatability	< 0.5% of span			< 0.5% of span	
Supply Pressure Sensitivity	< 0.1% of span per 1.0 psig (0.07 bar)			< 0.4% of span per 1.0 psig (0.07 bar)	
Physical Specifications					
Pneumatic Port Sizes	1/4" NPT female				
Media	Clean, dry, oil-free, instrument air, filtered to 40 micron				
Electrical Connections	Conduit 1/2" NPT female with 12" wire (NCP2-20-xxx-N) leads or DIN 43650 (NCP2-20-xxxD)				
Mounting	Direct, bracket (bracket included), optional 1-1/2" / 2" pipe mount kit (NCP2-P) or optional DIN rail mount kit (NCP2-D)				
Housing	Chromate-treated aluminum with epoxy paint. NEMA 4X (IP65)				
Elastomers	Buna-N				
Trim	Stainless steel; brass; zinc-plated steel				
Environmental Ratings	NEMA 4X / IP65				
Approvals	CSA File # 269584, FM (Haz-Loc)**				

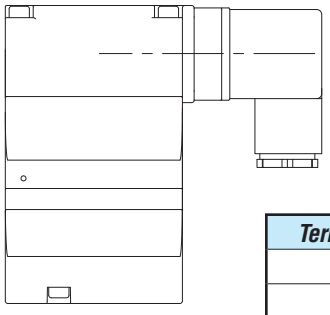
The unit must be calibrated in the plane it is mounted in.

****To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.***

Wiring



NCP2-20-xxxN units with wire leads



NCP2-20-xxxD units with DIN 43650 Connector

Terminal	4-20 mA Connection
1	Positive (+)
2	Negative (-)
3	Not Used
⏚	Ground (⏚)

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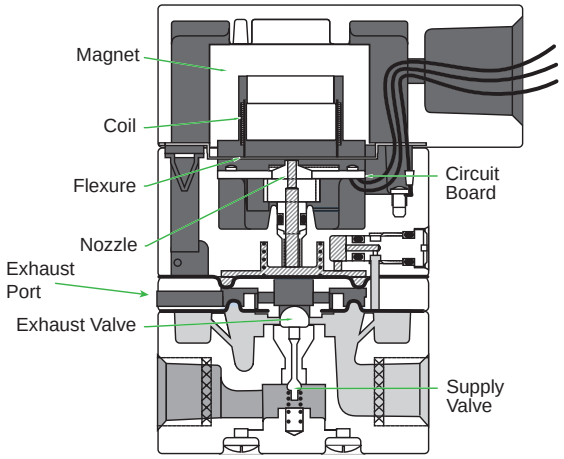
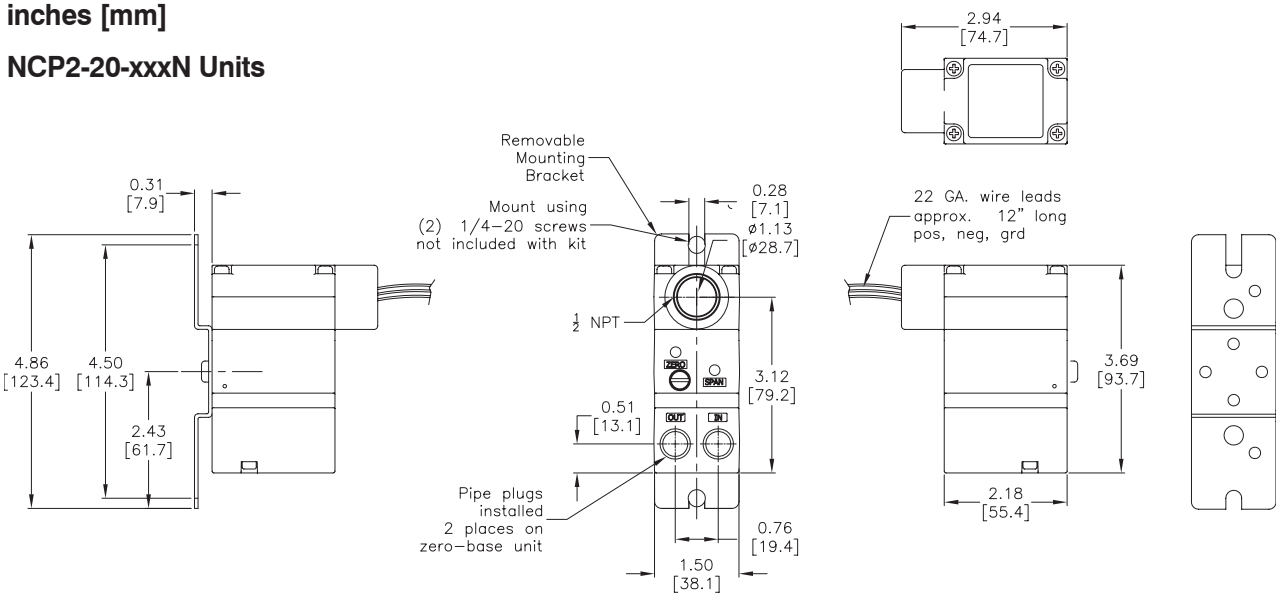


Supply Pressure
Output Pressure
Pilot Pressure
Atmospheric Pressure

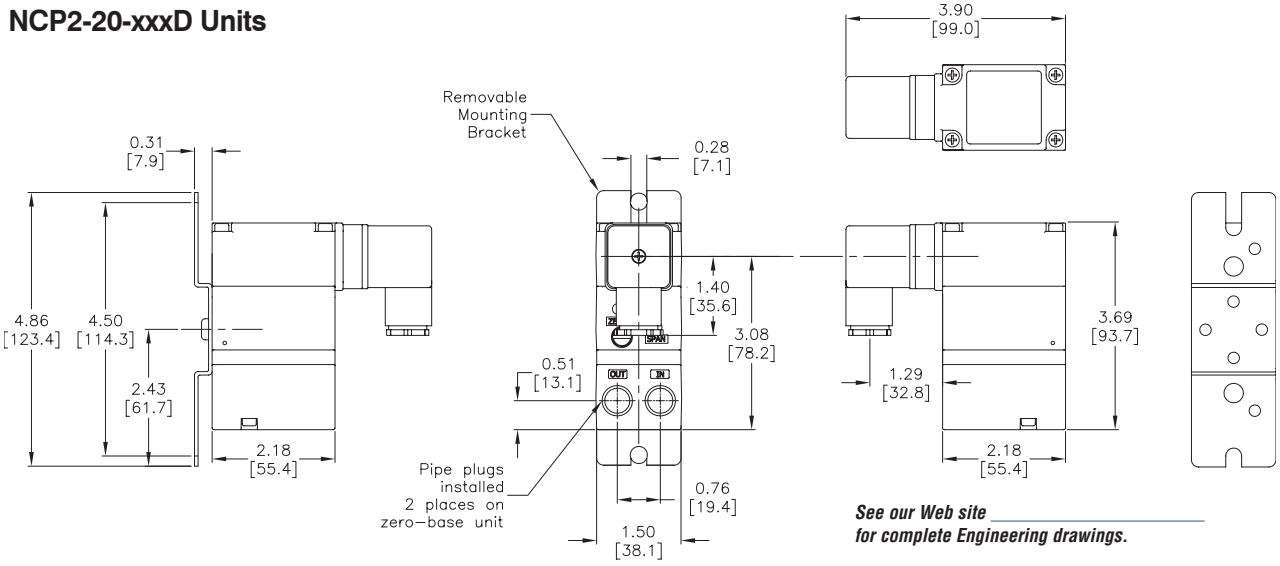
Dimensions

inches [mm]

NCP2-20-xxxN Units



NCP2-20-xxxD Units



See our Web site _____ for complete Engineering drawings.

Electropneumatic Transducers (I/P)
NCP2 Series - Accessories

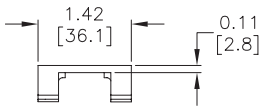
Part No. NCP2-D

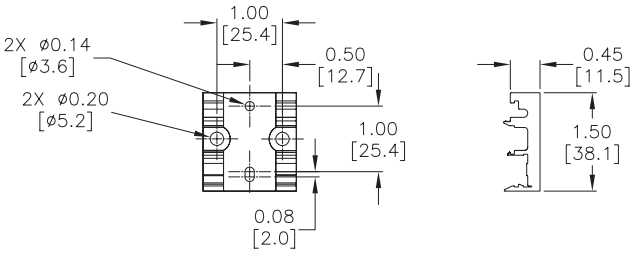
Part No. NCP2-P

NCP2 Series I/P Transducers Accessories			
Part Number	***Description***	***Price***	***Weight (lbs)***
NCP2-D	NITRA DIN rail mount adapter, for use with NCP2 series IP transducers. Includes: 1) Bracket 2) 10-32 Machine Screws 2) 6-32 Machine Screws		0.1
NCP2-P	NITRA pipe mounting hardware, for use with NCP2 series IP transducers. Includes: 1) Bracket 2) 2.0 inch U-Bolt w/nuts 2) 2.5 inch U-Bolt w/nuts		0.6

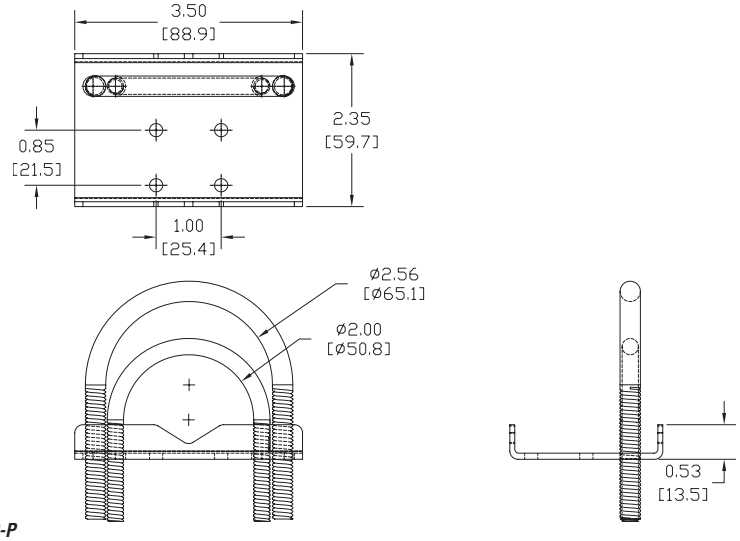
Dimensions

inches [mm]





Part No. NCP2-D



Part No. NCP2-P

See our Web site for complete Engineering drawings.