

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج کولرهای هوایی ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0015_02)							
شماره پیمان: 053 – 073 – 9184	I/P Converter Data Sheet							شماره صفحه : 1 از 7
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	
	BK	GCS	AA	120	IN	DS	0003	
							V00	

طرح نگهداشت و افزایش تولید 27 مخزن

I/P Converter Data Sheet
نگهداشت و افزایش تولید میدان نفتی بینک

V00	AUG. 2024	IFA	AAC	M.FAKHARIAN	M.SADEGHIAN	
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Status:

IFA: Issued For Approval
IFI: Issued For Information
AFC: Approved For Construction

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج کولرهای هوایی ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0015_02)																						
	I/P Converter Data Sheet <table border="1"> <tr> <td>نسخه</td> <td>سریال</td> <td>نوع مدرک</td> <td>رشته</td> <td>تسهیلات</td> <td>صادر کننده</td> <td>بسته کاری</td> <td>پروژه</td> </tr> <tr> <td>V00</td> <td>0003</td> <td>DS</td> <td>IN</td> <td>120</td> <td>AA</td> <td>GCS</td> <td>BK</td> </tr> </table>						نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	V00	0003	DS	IN	120	AA	GCS	BK	شماره صفحه : 2 از 7
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه																
V00	0003	DS	IN	120	AA	GCS	BK																
شماره پیمان: 053 – 073 – 9184																							

REVISION RECORD SHEET

PAGE	V00	V01	V02	V03	V04
1	X				
2	X				
3	X				
4	X				
5	X				
6	X				
7	X				
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					

PAGE	V00	V01	V02	V03	V04
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					
109					
110					
111					
112					
113					
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج کولرهای هوایی ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0015_02)									
شماره پیمان: 053 – 073 – 9184	I/P Converter Data Sheet								شماره صفحه : 3 از 7	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه		
	BK	GCS	AA	120	IN	DS	0003	V00		

CONTENTS

1.0	INTRODUCTION	4
2.0	I/P CONVERTER DATA SHEETS AND CATALOGUE	5

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج کولرهای هوایی ایستگاه تقویت فشار گاز بینک (قرارداد /BK-HD-GCS-CO-0015_02)								
شماره پیمان: 053 – 073 – 9184	I/P Converter Data Sheet							شماره صفحه : 4 از 7	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	AA	120	IN	DS	0003	V00	

1.0 INTRODUCTION

Binak oilfield in Bushehr province is a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city.

With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields Company (NISOC)
PROJECT:	Binak Oilfield Development – Manufacturing (w/Engineering & Material Supply) of Air Coolers
EPD/EPC CONTRACTOR (GC):	Petro Iran Development Company (PEDCO)
OWNER:	OWNER is collectively refer to National Iranian South Oil Company (NISOC) and Petro Iran Development Company (PEDCO)
EPC CONTRACTOR:	Joint Venture of : Hirgan Energy – Design & Inspection(D&I) Companies
VENDOR:	Aban Air Cooler (AAC)
EXECUTOR:	Executor is the party which carries out all or part of construction and/or commissioning for the project.
THIRD PARTY INSPECTOR (TPI):	Third Party Inspector
SHALL:	Is used where a provision is mandatory.
SHOULD:	Is used where a provision is advisory only.
WILL:	Is normally used in connection with the action by CLIENT rather than by an EPC/EPD CONTRACTOR, supplier or VENDOR.
MAY:	Is used where a provision is completely discretionary.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج کولرهای هوایی ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0015_02)								
شماره پیمان: 053 – 073 – 9184	Vibration Switch Data Sheets and Catalogue							شماره صفحه : 5 از 7	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	AA	120	IN	DS	0003		V00

2.0 I/P CONVERTER DATA SHEETS AND CATALOGUE

I/P CONVERTER DATA SHEET						
1. Type : Rail-Mount ☐ Field -Unit ☒ 2. Mounting : Flush ☐ Surface ☒ Local ☐ 3. Input : 4-20 mA. ☒ 0-20 mA ☐ 12-20 mA ☐ 4. Out Put : 3-15 Psi ☒ 6-30 psi ☐ 5. Pneumatic Connection : 1/2" NPT ☐ 1/4 " NPT ☒ 6. Electrical Connection : 1/2"G ** ☒ M20x1.5 ☐ 7. Enclosure Material : Aluminium diecasting housing 8. Air consumption : Below 2 LPM (sup = 0.14 MPa) 9. Available Instrument air (Min/Max) : 4 / 9 barg				10. Enclosure : Safe Area ☐ Explosion Proof ☒ 11. IP Class : IP 54 ☐ IP 55 ☐ IP 66 ☒ 12. Enclosure Protection : EEx ia IIC T6 13. Accessories : Air Filter Regulator , pressure gauge 14. Manufacturer & Model Type Of Converter: YTC , YT-930-I-12L01 15. Manufacturer & Model Type Of Regulators I/P Converter Regulator : YTC , YT-200-AN111 Fan's positioner Regulator : YTC , YT-200-BN211		
REV.	Tag NO.	Acting Model	Ambient Temp		Service	QTY
			Min	Max		
1	TY-2102 A/B/C	Direct	5° C	50.26 ° C	Air Cooler	3
1	TY-2101 A/B/C				Air Cooler	3
General Note : - Please Refer To Following Pages For Further Information. ** Suitable adapter (1/2" G to M20x1.5) would be considered by AAC.						

IP converters YT-930 / YT-940

Design features

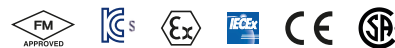
- **Flameproof housing (YT-940)** for Zone 1 installation.
- **High accuracy and sensitivity** with pressure sensor.
- **Analogue PID control.** High resolution proportional control
- **No effect from mounting orientation**

Item type		YT-930	YT-940
Input signal		4-20 mA DC	
Output pressure	Standard	[1] 0.02 ~ 0.1 MPa (0.2 ~ 1.0 bar)	
	Multi-range	[2] 0.00 ~ 0.12 MPa (0 ~ 1.2 bar)	
		[3] 0.04 ~ 0.2 MPa (0.4 ~ 2.0 bar)	
		[4] 0.00 ~ 0.23 MPa (0 ~ 2.3 bar)	
Supply pressure	Standard	[1] 0.13 ~ 0.16 MPa (1.3 ~ 1.6 bar)	
	Multi-range	[2] 0.14 ~ 0.16 MPa (1.4 ~ 1.6 bar)	
		[3] 0.22 ~ 0.24 MPa (2.2 ~ 2.4 bar)	
		[4] 0.25 ~0.27 MPa (2.5 ~ 2.7 bar)	
Explosion protection type		ATEX, IECEx Ex ia IIC T5/T6 Gb, Ex ia IIIC T100°C/ T85°C Db	FM, CSA Class I Division 1 Groups A,B,C,D Class II, III Division 1 Groups E,F,G Class I Zone 1 AEx d IIC T6 Ta=-40°C to + 75°C, T5 Ta=-40°C to + 85°C, Type 4X, IP66 Zone 21 AEx tb IIIC T85°C Ta=-40°C to +75°C, T100°C Ta=-40°C to +85°C, Type 4X, IP66 KCs Ex d IIC T5/T6
Air consumption		Below 2 LPM (sup = 0.14 MPa) Below 0.08 CFM (sup = 20 psi)	
Flow capacity		70 LPM (sup = 0.14 MPa) 2.47 CFM (sup = 20 psi)	
Explosion temp.		-40 to +60 °C (T5) / -40 to +40 °C (T6)	-40 to +85 °C (T5) / -40 to +75 °C (T6)
Operating temp.		-40 to +85 °C (-22 to +185 °F)	
Linearity		±0.5% F.S.	
Hysteresis		±0.5% F.S.	
Sensitivity		±0.2% F.S.	
Repeatability		±0.3% F.S.	
Air connection		Rc ¼, ¼ NPT	
Conduit		G ½	
Ingress protection		IP66	Type 4X, IP66
Impedance		Max. 390Ω @20mA DC	Max. 390Ω @20mA DC
Material		Aluminium diecasting	
Weight		1.6 kg (3.53 lb)	2.5 kg (5.6 lb)



YT-930

YT-940



Product code

YT-930 - N - 1 - 1 - L - 0 - 0

Model

YT-930 = Intrinsically safety type
YT-940 = Flameproof type

Explosion protection

YT-930
N = Non-explosionproof
i = ATEX, IECEx

YT-940
C = KCs, FM, CSA

Output pressure

1 = 0.02 to 0.1 MPa
2 = 0.00 to 0.12 MPa
3 = 0.04 to 0.2 MPa
4 = 0.00 to 0.23 MPa

Conduit - air connection

1 = G 1/2 - Rc 1/4
2 = G 1/2 - 1/4 NPT

Operating temp. (non-explosionproof)¹

L = -40 to +85 °C (-40 to +185 °F)

Option

0 = None
1 = Feedback signal (4-20 mA DC)

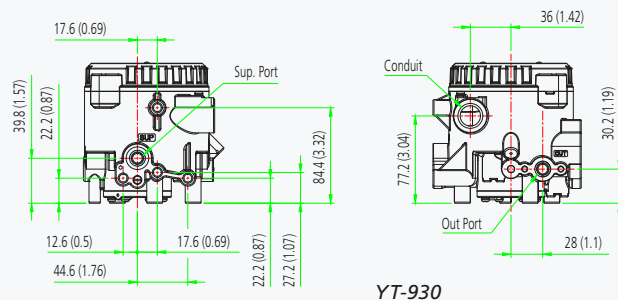
Gauge

0 = None
1² = 0 to 0.2 MPa
2³ = 0 to 0.4 MPa

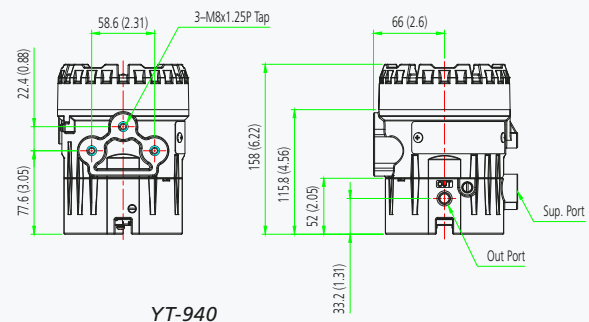
Notes:

1. This option is the normal operating temperature of the product and is not related to explosion protection temperature. See certificates for explosion protection temperature.
2. For 1 or 2 in output pressure option.
3. For 3 or 4 in output pressure option.

Dimensions: mm (Inches ")



YT-930



YT-940

Air Filter Regulators YT-200 / YT-205 / YT-220 / YT-225

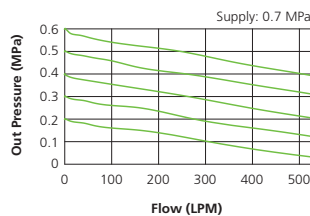
Design features

- **Stable Output and repeatability.** Provides constant control under variable flow rates and supply pressures.
- **Relief flow capability.** Discharges pressure if outer pressure is higher than set pressure.
- **Light weight and compact size.** Reduces installation costs.
- **5 micron filter.** Protects pneumatic instruments from dirty air.
- **Manual or Auto Draining Option**

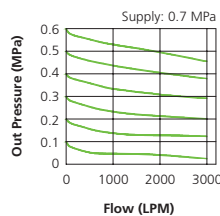


CE

YT-200 / YT-205 Flow (LPM)



YT-220 / YT-225 Flow (LPM)



Product Code

YT-200 - A - N - 0 - 1 - 0

Model

YT-200 = Aluminum 1/4"
YT-205 = Stainless Steel 1/4"
YT-220 = Aluminum 1/2"
YT-225 = Stainless Steel 1/2"

Adjustable Range

A = 0 - 0.42 MPa
B = 0 - 0.84 MPa

Connection Type

P = PT
N = NPT

Gauge

0 = None
1 = 0 - 0.4 MPa
2 = 0 - 1.0 MPa

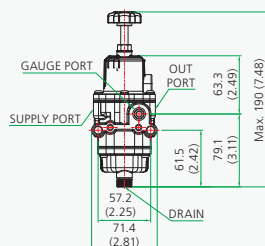
Operating Temp.

1 = -20 - 70 °C
2 = -20 - 120 °C
3 = -40 - 70 °C

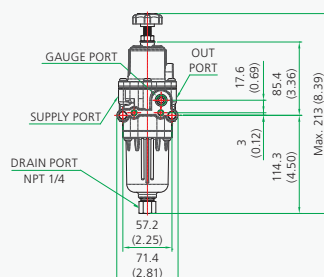
Option

0 = Manual drain
1 = Auto drain

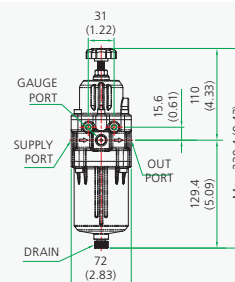
Item Type	YT-200	YT-220	YT-205	YT-225
Max. Supply Pressure	1.7 MPa (17 bar)			
Max. Output Pressure	0.42 MPa (A Type), 0.84 MPa (B Type)			
Air Connection	PT (NPT) 1/4	PT (NPT) 1/2	NPT 1/4	NPT 1/2
Gauge Connection	PT (NPT) 1/4	PT (NPT) 1/4	NPT 1/4	NPT 1/4
Operating Temp.	-20 - 70°C (-4 - 158°F) (Standard type)			
Min. Filtering Size	5 micron			
Material	Aluminium Diecasting		Stainless Steel 316	
Weight	0.6 kg (1.7 lb)	0.86 kg (1.89 lb)	1.4 kg (3.0 lb)	2.1 kg (4.6 lb)



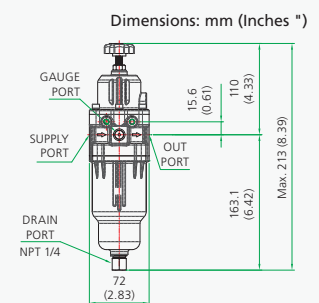
YT-200/205 Manual drain



YT-200/205 Auto drain



YT-220/225 Manual drain



YT-220/225 Auto drain