2/2 energise to open (normally closed)

Certification T6 (Tamb = -55°C to +50°C (-67°F to + 122°F)) & T4 (Max ambient +90°C (+194°F)) or equipment must be used within 'T' class temp ranges shown.

EX II 2 GD - gas and dust environments.

Exd protection, gas group IIC.

Atex certification SIRA 05ATEX1156, complies with ATEX directive 94/9/EC IECEx certification IECEx SIR 05.0029

Safety integrity level SIL 3 or SIL 4 (SIL 4 in a redundant configuration only) Protection IP66/X8, NEMA 4X



Technical features

Max. inlet pressure: 0-12 bar (0-174 psi) Flow rates: $C_v = 0.6$ USgpm for 1 psi Δp $K_v = 8.7$ I/min for 1 bar (15 psi) Δp

Port size: 1/4"

Process connections: NPT

Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media:Customer to specify and confirm

compatibility **Weight:** 2 kg

Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 80 MS	Drop Out	< 60 MS	Drop-Out Voltage	10 - 20% of nominal
Voltage Protection	Surge s	uppression	diodes fitte	ed as STD	Coil Encapsulation	Class H
Leak Performance	Bubble	tight at -50	°C. <30cc/	m at -55 °C.	Coil Duty Cycle	100%

SEE TABULATION VIEW ON TOP WITH TOP COVER REMOVED A7 PORT 'B' OUTLET TO THE TOP COVER AD MOUNTING HOLES

ICO3S 1/4" 2/2 12 BAR (174 PSI) AUTO



Temperature ratings:

Media (min/max): -55°C/90°C (-67°F/194°F)

Ambient: must be used within 'T' class temperature ranges shown

Coil Rating: 190 ohms

Power Consumption: 3 watts

Operation: Automatic

Materials: Valve body & trim -

316L stainless steel

O-Rings seats & seals - nitrile

Paint finish - 316LSS coil housing

- unpainted

Ordering information:

Quote: Y011AA1H1BS Options: None

ICO3S 1/4" 2/2 12 BAR (174 PSI) JSMO



Temperature ratings:

Media (min/max): -10°C/90°C (+14°F/194°F)

Ambient: must be used within 'T' class temperature ranges shown

Coil Rating: 190 ohms Power Consumption:

3 watts

Operation:

Jackscrew manual override

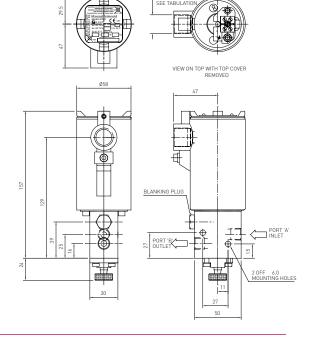
Materials:

Valve body & trim - 316L stainless steel

O-Rings seats & seals - FKM Paint finish - 316LSS coil housing - unpainted

Ordering information:

Quote: Y011SA1V1BS Options: None





Model ICO3S 1/4" 3/2 UNI

Direct acting solenoid valve

High flow

Max inlet pressure 12 bar (174 psi)

A direct acting solenoid operated valve for the control of pneumatic or hydraulic operated equipment

Reliable and long life, ideal for a one time installation

ATEX, CSA, GOST K & R, IECEX and NEMA 4X

Technical features

Maximum inlet pressure: 12 bar (174 psi)

Flow rates:

 $C_{_{V}}$ = 0.6 USgpm for 1 psi Δp $K_{_{V}}$ = 8.64 l/min for 1 bar (15 psi) Δp

Temperature ratings:

Media (min/max -50°C/90°C (-58°F/194°F)) Ambient (min/max -50°C/60°C (-58°F/140°F))

Valve size: 1/4" poppet valve

Process connections: 1/4" NPT, 1/4" BSP

Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT **Signal connection:** 1/4" NPT **Media:** Liquid & gases

Weight: 2.5 kg
Materials:

Solenoid pot - stainless steel - BFC 316 Top cover - stainless steel - BFC 316

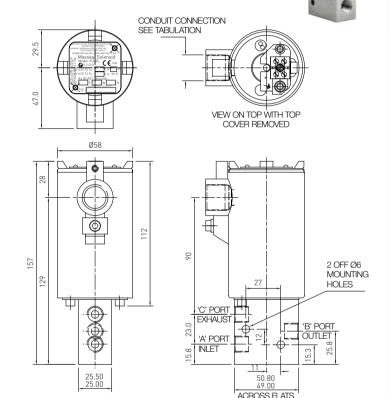
Valve body & trim materials -

316 stainless steel - 316L stainless steel

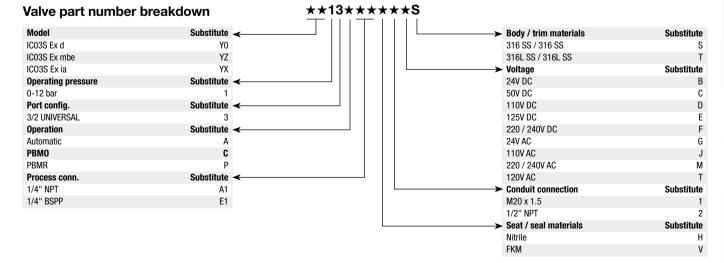
O-rings & seals - nitrile (NBR) Coil insulation - class H

ICO3S 1/4" 3/2 AUTO



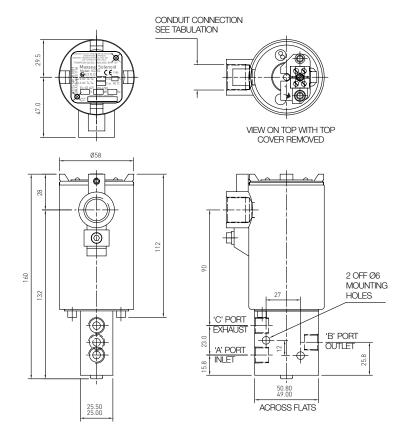


Profile and dimensions mm



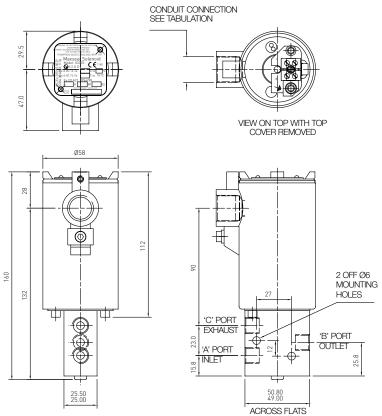
ICO3S 1/4" 3/2 PBMO





ICO3S 1/4" 3/2 PBMR





Certification T6 (Tamb = -55° C to $+50^{\circ}$ C (-67° F to $+122^{\circ}$ F)) & T4 (Max ambient $+90^{\circ}$ C ($+194^{\circ}$ F) or equipment must be used within 'T' class temp ranges shown.

EX II 2 GD - gas and dust environments.

Exd IIX - Exd protection, gas group IIC.

Atex certification SIRA 05ATEX1156, complies with ATEX directive 94/9/EC IECEx certification IECEx SIR 05.0029

Safety integrity level SIL 3 or SIL 4 (SIL 4 in a redundant configuration only) Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure: 0-12 bar (0-174 psi) Flow rates:

 $C_v = 0.6$ USgpm for 1 psi Δp K, = 8.7 I/min for 1 bar (15 psi) Δp

Temperature ratings:

Media (min/max): -55°C/90°C (-67°F/194°F) **Ambient:** must be used within 'T' class

temperature ranges shown

Port size: 1/4"

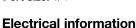
Conduit / Signal Conns: M20 x 1.5mm IS0 (F) **Media:** Customer to specify and confirm

157

compatibility
Weight: 2 kg
Materials:
Valve body & trim -

316L stainless steel
O-Rings seats & seals - nitrile
Paint finish - 316LSS coil housing -

unpainted



Voltage (nominal)	24V DC	Pull-in Voltage	>= 87.5% of nominal
Voltage Protection	Surge suppression diodes fitted as STD	Coil Encapsulation	Class H
Leak Performance	Bubble tight at -50°C. <30cc/m at -55°C.	Coil Duty Cycle	100%

ICO3S 1/4" 3/2 12 BAR (174 PSI) AUTO - 90



3/2 universal Process connections: NPT **Operation:** Automatic

Response Times (Typ): Pull-in: < 80 MS

Drop Out: < 60 MS **Drop-Out Voltage:**

10 - 20% of nominal

Coil Rating: 190 ohms Power Consumption:

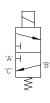
3 watts

Ordering information:

Quote: Y013AA1H1BS-90 Options: Body rotated through

90° of normal position

ICO3S 1/4" 3/2 12 BAR (174 PSI) AUTO - 180



3/2 universal

Process connections: NPT Operation: Automatic

Response Times (Typ): Pull-in: < 80 MS

Drop Out: < 60 MS **Drop-Out Voltage:**

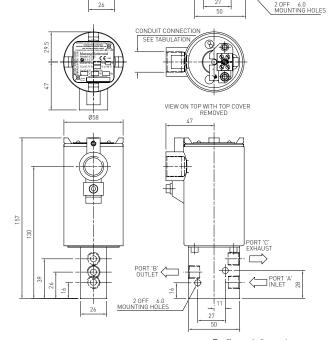
10 - 20% of nominal

Coil Rating: 190 ohms **Power Consumption:**

3 watts

Ordering information:

Quote: Y013AA1H1BS-180 Options: Body rotated through 180deg (outlet under conduit)



PORT 'C'

CONDUIT CONNECTION

ICO3S 1/4" 3/2 MANIFOLD MOUNT 12 BAR (174 PSI) AUTO

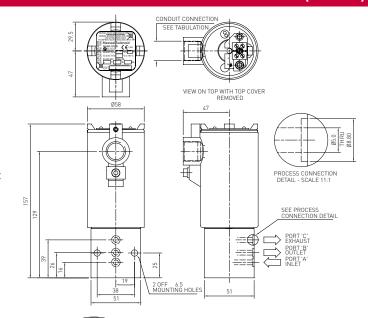


3/2 universal Process connections: 5mm drilled ports-flg MTD **Operation:** Automatic Response Times (Typ): Pull-in: < 80 MS

Drop Out: < 60 MS

Drop-Out Voltage: 10 - 20% of nominal Coil Rating: 190 ohms **Power Consumption:** 3 watts Ordering information:

Quote: Y013AKFH1BS Options: Manifold mount



ICO3S 1/4" 3/2 EX ia 12 BAR (174 PSI) AUTO



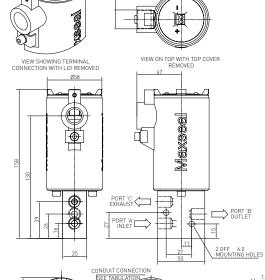
3/2 universal Process connections: NPT **Operation:** Automatic Response Times (Typ):

Pull-in: 3-4 sec Drop Out: < 60 MS **Drop-Out Voltage:**

10 - 20% of nominal

Coil Rating: 293 ohms **Power Consumption:** 0.43 watts

Ordering information: Quote: YX13AA1H1BS Options: None



ICO3S 1/4" 3/2 NAMUR 12 BAR (174 PSI) AUTO

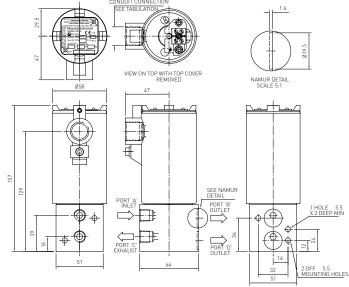


3/2 universal **Process connections:** Namur mount with 1/4 NPT **Operation:** Automatic Response Times (Typ): Pull-in: < 80 MS

Drop Out: < 60 MS **Drop-Out Voltage:** 10 - 20% of nominal Ordering information: Quote: Y013ANAH1BS Options: Namur mount supplied with A4-70

Coil Rating: 190 ohms **Power Consumption:**

3 watts mounting bolts and O-rings



ICO3S 1/4" 3/2 12 BAR (174 PSI) TPMR



3/2 fixed port configuration Process connections:

NPT

Operation:Tamperproof manual reset button

Response Times (Typ):

Pull-in: < 80 MS Drop Out: < 60 MS Drop-Out Voltage:

10 - 20% of nominal

Coil Rating:

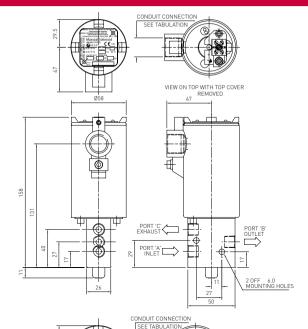
190 ohms

Power Consumption:

3 watts

Ordering information:

Quote: Y013TA1H1BS Options: None



ICO3S 1/4" 3/2 MANIFOLD MOUNT 12 BAR (174 PSI) PBMO



3/2 universal Process connections:

5mm drilled ports-flg MTD

Operation:

Push button manual override

Response Times (Typ):

Pull-in: < 80 MS Drop Out: < 60 MS **Drop-Out Voltage:**

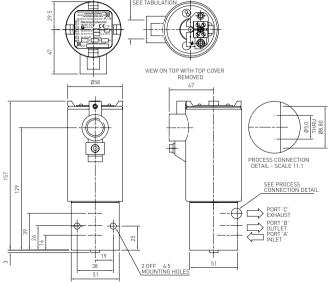
10 - 20% of nominal

Coil Rating: 190 ohms Power Consumption:

3 watts

Ordering information:

Quote: Y013CKFH1BS Options: Manifold mount



ICO3S 1/4" 3/2 NAMUR 12 BAR (174 PSI) PBMR



3/2 universal Process connections: Namur mount with 1/4 NPT

Operation:

Push button manual reset

Response Times (Typ):

Pull-in: < 80 MS Drop Out: < 60 MS

Drop-Out Voltage:

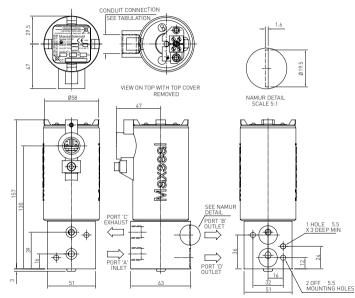
10 - 20% of nominal

Coil Rating: 190 ohms **Power Consumption:**

3 watts

Ordering information:

Quote: Y013PNAH1BS
Options: Namur mount
supplied with A4-70
mounting bolts and O-rings



ICO3S 1/4" 3/2 MANIFOLD MOUNT 12 BAR (174 PSI) PBMR



3/2 universal Process connections: 5mm drilled ports-flq MTD

Operation:

Push button manual reset Response Times (Typ):

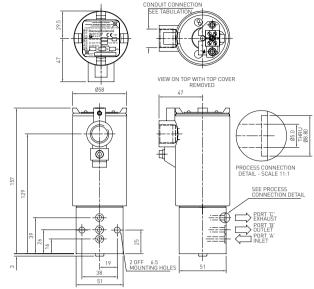
Pull-in: < 80 MS Drop Out: < 60 MS **Drop-Out Voltage:**

10 - 20% of nominal Coil Rating: 190 ohms Power Consumption:

3 watts

Ordering information:

Quote: Y013PKFH1BS Options: Manifold mount



ICO3S 1/4" 3/2 12 BAR (174 PSI) JSMO



3/2 universal Process connections:

Operation:

Jack screw manual override Response Times (Typ):

Pull-in: < 80 MS Drop Out: < 60 MS **Drop-Out Voltage:**

10 - 20% of nominal

Coil Rating:

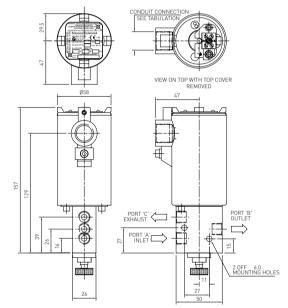
190 ohms

Power Consumption:

3 watts

Ordering information:

Quote: Y013SA1H1BS Options: None



ICO3S 1/4" 3/2 NAMUR 12 BAR (174 PSI) JSMO



3/2 universal **Process connections:**

Namur mount with 1/4 NPT Operation:

Jackscrew manual override

Response Times (Typ): Pull-in: < 80 MS Drop Out: < 60 MS

Drop-Out Voltage:

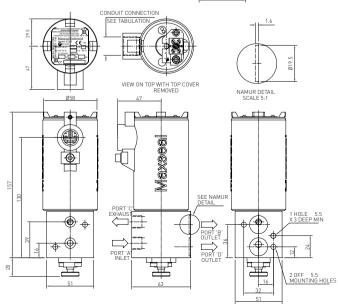
10 - 20% of nominal Coil Rating: 190 ohms

Power Consumption:

3 watts

Ordering information:

Quote: Y013SNAH1BS Options: Namur mount supplied with A4-70 mounting bolts and O-rings



5/2 fixed port configuration

Certification T6 (Tamb = -55°C to +50°C (-67°F to +122°F)) & T4 (Max ambient +90°C (+194°F)) or equipment must be used within 'T' class temp ranges shown.

EX II 2 GD - gas and dust environments.

Exd protection, gas group IIC.

Atex certification SIRA 05ATEX1156, complies with ATEX directive 94/9/EC

IECEx certification IECEx SIR 05.0029

Safety integrity level SIL 3 or SIL 4 (SIL 4 in a redundant configuration only) Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure: 0-12 bar (0-174 psi)

Flow rates:

 $C_v = 0.6 \text{ USgpm for 1 psi } \Delta p$ $K_{r} = 8.7$ l/min for 1 bar (15 psi) Δp

Temperature ratings:

Media (min/max): -55°C/90°C (-67°F/194°F) Ambient: must be used within 'T' class

temperature ranges shown

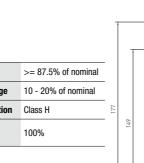
Port size: 1/4"

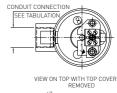
Conduit / Signal Conns:

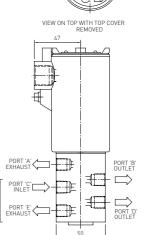
M20 x 1.5mm ISO (F)

Media: Customer to specify and confirm

compatibility







Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 80 MS	Drop Out	< 60 MS	Drop-Out Voltage	10 - 20% of nominal
Voltage Protection	Surge s	uppression	diodes fitte	d as STD	Coil Encapsulation	Class H
Leak Performance		Bubble tight at -50 °C. <30cc/m at -55 °C.		Coil Duty Cycle	100%	

ICO3S 1/4" 5/2 12 BAR (174 PSI) AUTO



Process connections:

Weight: 2.3 kg **Operation:** Automatic

Coil Rating: 74 ohms

Power Consumption:

7.8 watts

Materials:

Valve body & trim - 316L stainless steel

O-Rings seats & seals - nitrile Paint finish - 316LSS coil housing - unpainted

Ordering information:

Quote: Y015AA1H1BS Options: None

ICO3S 1/4"5/2 NAMUR 12 BAR (174 PSI) AUTO



Process connections:

Namur mount with 1/4 NPT Weight: 2.3 kg

Operation: Automatic **Coil Rating:**

Power Consumption:

7.8 watts

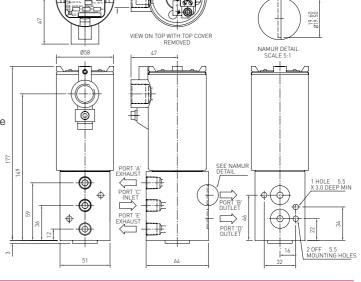
74 ohms

Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals - nitrile Paint finish - 316LSS coil

housing - unpainted

Ordering information: Quote: Y015ANAH1BS Options: Namur mount supplied with A4-70 mounting bolts and O-rings



CONDUIT CONNECTION

ICO3S 1/4" 5/2 12 BAR (174 PSI) PBMO



Process connections:

NPT

Weight: 2.3 kg

Operation: Push button

manual override

Coil Rating: 74 ohms

Power Consumption:

7.8 watts

Materials:

Valve body & trim - 316L

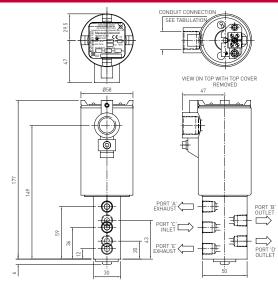
stainless steel

O-Rings seats & seals - FKM Paint finish - 316LSS coil

housing - unpainted **Ordering information**:

Quote: Y015CA1V1BS

Options: None



ICO3S 1/4" 5/2 12 BAR (174 PSI) PBMR



Process connections:

NPT

Weight: 2.5 kg

Operation:

Push button manual reset **Coil Rating:** 293 ohms **Power Consumption:**

2 watts

Materials:

Valve body & trim - 316L

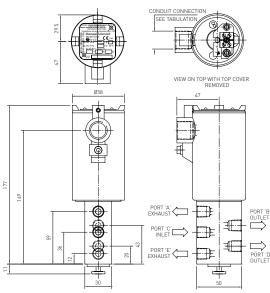
stainless steel

O-Rings seats & seals - nitrile Paint finish - 316LSS coil housing - unpainted

Ordering information:

Quote: Y015PA1H1BS

Options: None



ICO3S 1/4" 5/2 NAMUR 12 BAR (174 PSI) JSMO



Process connections:

Namur Mount With 1/4 NPT **Weight:** 2.3 kg

Operation:

Jackscrew manual override

Coil Rating: 74 ohms

Power Consumption:

7.8 watts

Materials:

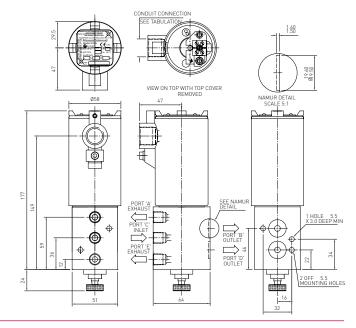
Valve body & trim - 316L stainless steel O-Rings seats & seals - nitrile

Paint finish - 316LSS coil housing - unpainted

Ordering information:

Quote: Y015SNAH1BS

Options: None



2/2 energise to open (normally closed)

Certification T6 (Tamb = -55°C to +50°C (-67°F to +122°F)) & T4 (Max ambient +90°C (+194°F) or equipment must be used within 'T' class temp ranges shown.

EX II 2 GD - gas and dust environments.

Exd protection, gas group IIC.

Atex certification SIRA 05ATEX1156, complies with ATEX directive 94/9/EC

IECEx certification IECEx SIR 05.0029

Safety integrity level SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X



Technical features

Max. inlet pressure: 0-12 bar (0-174 psi)

Flow rates:

 $C_v = 2.1$ USgpm for 1 psi Δp $K_v = 30.2$ l/min for 1 bar (15 psi) Δp

Temperature ratings:

Media (min/max): $-55^{\circ}\text{C}/90^{\circ}\text{C}$ ($-67^{\circ}\text{F}/194^{\circ}\text{F}$) Ambient: must be used within 'T' class

temperature ranges shown

Port size: 1/2"

Process connections: NPT Conduit / Signal Conns: M20 x 1.5mm IS0 (F)

Media: Customer to specify and confirm

compatibility **Weight:** 2.5 kg **Operation:** Automatic

Materials

Valve body & trim - 316L stainless steel

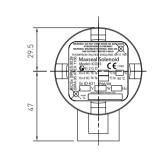
O-Rings seats & seals - nitrile

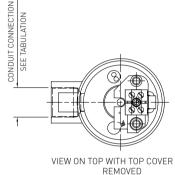
Paint finish - 316LSS coil housing - unpainted

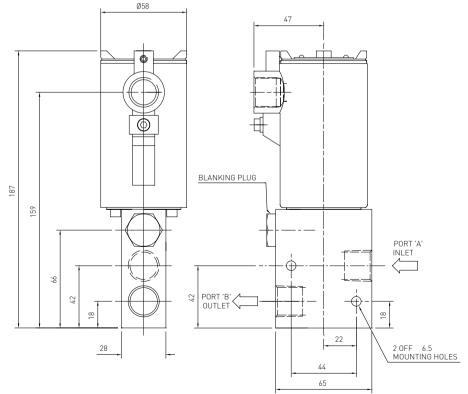
Ordering information Quote: Y011AA3H1BS

Options: None









Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 80 MS	Drop Out	< 60 MS	Drop-Out Voltage	10 - 20% of nominal
Coil Rating	74 ohms				Power Consumption	7.8 watts
Voltage Protection	Surge suppre	ession diodes fi	tted as STD		Coil Encapsulation	Class H
Leak Performance	Bubble tight	at -50 °C. <30d	cc/m at -55 °C.		Coil Duty Cycle	100%

3/2 universal

Certification T6 (Tamb = -55°C to +50°C (-67°F to +122°F)) & T4 (Max ambient +90°C (+194°F)) or equipment must be used within 'T' class temp ranges shown.

EX II 2 GD - gas and dust environments.

Exd IIX - Exd protection, gas group IIC.

Atex certification SIRA 05ATEX1156, complies with ATEX directive 94/9/EC

IECEx certification IECEx SIR 05.0029

Safety integrity level SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X



Technical features

Max. inlet pressure: 0-12 bar (0-174 psi) Temperature ratings: Media (min/max): -55°C/90°C

(-67°F/194°F)

Ambient: must be used within 'T' class temperature ranges shown

Port size: 1/2"

Process connections: NPT Conduit / Signal Conns: M20 x 1.5mm IS0 (F)

Media:

Customer to specify and confirm compatibility

Materials

Valve body & trim - 316L stainless

O-Rings seats & seals - nitrile Paint finish - 316LSS coil housing

- unpainted

Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 80 MS	Drop Out	< 60 MS	Drop-Out Voltage	10 - 20% of nominal
Coil Rating	74 ohms				Power Consumption	7.8 watts
Voltage Protection	Surge suppre	ession diodes fi	tted as STD		Coil Encapsulation	Class H
Leak Performance	Bubble tight	at -50 °C. <300	cc/m at -55 °C.		Coil Duty Cycle	100%

ICO3S 1/2" 3/2 12 BAR (174 PSI) AUTO



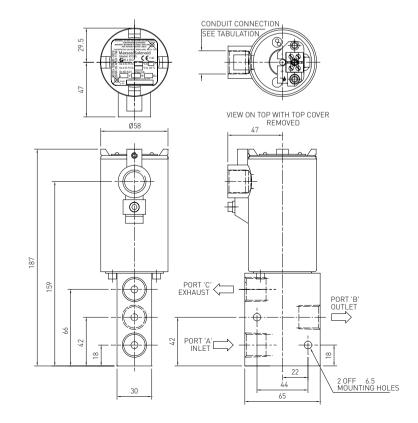
Flow rates:

 $C_v = 2.1 \text{ USgpm for 1 psi } \Delta p$ $K_v = 30.2 \text{ l/min for 1 bar (15 psi) } \Delta p$

Weight: 2.5 kg **Operation:** Automatic Coil Rating: 74 ohms

Power Consumption: 7.8 watts

Ordering information: Quote: Y013AA3H1BS Options: None



ICO3S 1/2" 3/2 12 BAR (174 PSI) PBMO



Flow rates:

 $C_v = 2.1$ USgpm for 1 psi Δp $K_{v} = 30.2 \text{ l/min for 1 bar}$ (15 psi) ∆p

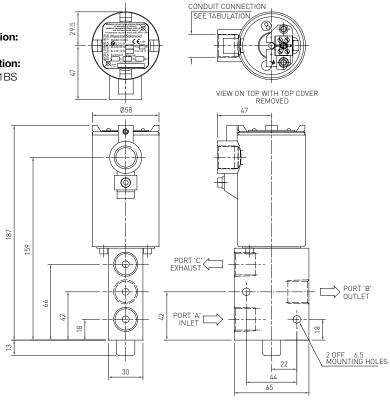
Weight: 2.5 kg Operation:

Push button manual overide Coil Rating: 74 ohms

Power Consumption: 7.8 watts

Ordering information:

Quote: Y013CA3H1BS Options: None



ICO3S 1/2" 3/2 12 BAR (174 PSI) PBMR



Process connections:

NPT 2.8 kg

Operation:

Push button manual reset

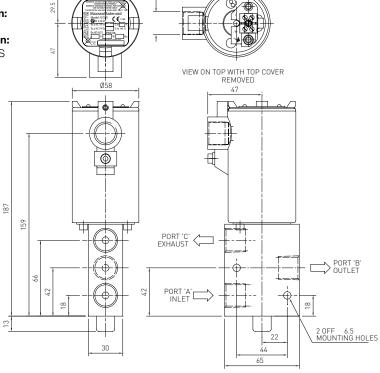
Coil Rating: 190 ohms

Power Consumption:

3 watts

Ordering information:

Quote: Y013PA3H1BS Options: None



CONDUIT CONNECTION

SEE TABULATION

Direct acting solenoid valve
Low pressure, high flow
Max inlet pressure 20 bar (290 psi)

Reliable and long life, ideal for a one time installation Control of pneumatic or hydraulic operated equipment ATEX, CSA, GOST K & R, IECEX and NEMA 4X



Maximum inlet pressure:

20 bar (290 psi)

Temperature ratings:

Media (min/max -60°C/90°C (-76°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT

Media: Liquid & gases

Flow rates:

 $C_V = 0.8$ USgpm for 1 psi Δp $K_V = 11.5$ l/min for 1 bar (15 psi) Δp

Valve size:

1/4" balanced poppet valve

Process connections:

1/4" NPT, 1/2" BSP

Weight: 5 kg



Materials:

Solenoid pot - stainless steel - BFC 316

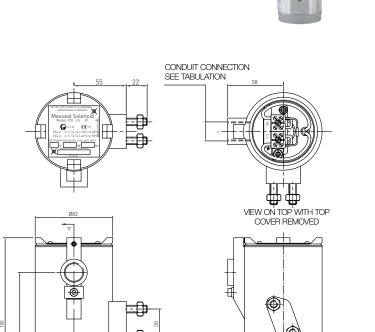
Top cover - stainless steel - BFC

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim materials

O-rings seats & seals -high nitrile (NBR)

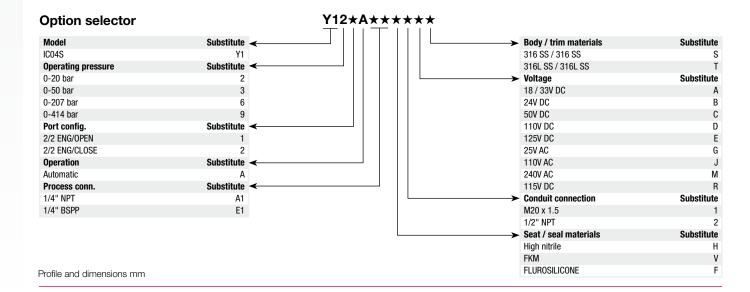
(INDIN)

Coil insulation - class H



'A' PORT

'B' PORT



Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2 and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only) Protection IP66/X8, NEMA 4X

Technical features

Temperature ratings:

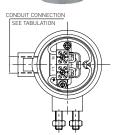
Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media:

Customer to specify and confirm compatibility



Electrical information

Voltage (nominal)	24V DC					
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS		
Voltage Protection	Surge suppression diodes fitted as STD					
Leak Performance	Bubble tight					
Pull-in Voltage	>= 87.	5% of nomi	nal			
Drop-Out Voltage	10 - 20	% of nomin	al			
Coil Encapsulation	Class H					
Coil Duty Cycle	100%					

ICO4S 1/4" 2/2 20 BAR (290 PSI) AUTO EXTREME SERVICE



2/2 energise to open (normally closed)

Max. inlet pressure:

0-20 bar (0-290 psi)

Flow rates:

 $C_V = 0.8$ USgpm for 1 psi Δp $K_V = 11.5$ l/min for 1 bar (15 psi) Δp

Port size: 1/4"
Coil Rating: 60 ohms
Power Consumption:

9.6 watts

Process connections: NPT

Weight: 6.5 kg **Operation:** Automatic

Materials:

Valve body & trim aluminium bronze O-Rings seats & seals -

high nitrile

Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y121AA1H1BM003 Options: Extreme service

(9.6 watts)

ICO4S 1/4" 2/2 20 BAR (290 PSI) PBMR EXTREME SERVICE



2/2 energise to close (normally open)

Max. inlet pressure: 0-20 bar (0-290 psi)

Flow rates:

 $C_v = 0.8$ USgpm for 1 psi Δp $K_v = 11.5$ l/min for 1 bar (15 psi) Δp

Port size: 1/4"
Coil Rating: 60 ohms
Power Consumption:

9.6 watts

Process connections:

NPT

Weight: 5 kg Operation:

Push button manual reset

Materials:

Valve body & trim - 316L stainless steel

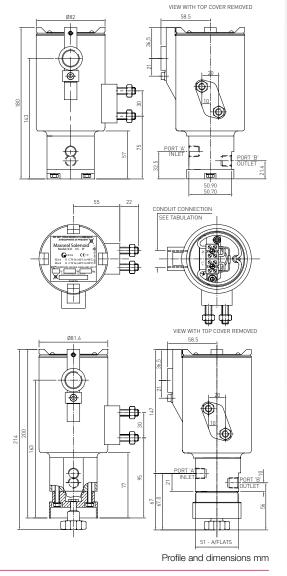
O-Rings seats & seals -

high nitrile Paint finish - stainless steel

coil housing - unpainted

Ordering information:Quote: Y122PA1H1BS003 Options: Extreme service

(9.6 Watts)



Model: ICO4S 1/4" 3/2 UNI Direct acting solenoid valve Low pressure, high flow Max inlet pressure 20 bar (290 psi)

Reliable and long life, ideal for a one time installation Control of pneumatic or hydraulic operated equipment ATEX, CSA, GOST K & R, IECEX and NEMA 4X



Technical features

Maximum inlet pressure:

20 bar (290 psi) Flow rates:

 $C_{v} = 0.8$ USgpm for 1 psi Δp $K_{v} = 11.5 \text{ l/min for 1 bar}$ (15 psi) ∆p

Process connections: NPT Conduit connection: M20 x 1.5 conduit thread

Customer to specify and confirm compatibility

ICO4S 1/4" 3/2 20 BAR (290 PSI) AUTO



Viton®

Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/ max 0°C/60°C (32°F/140°F))

Valve size:

1/4" balanced poppet valve

Weight: 5.5 kg

Materials:

Solenoid pot - stainless steel - BFC 316

Top cover - stainless steel -BFC 316

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim materials O-rings seats & seals -high nitrile (NBR)

Coil insulation - class H

۷

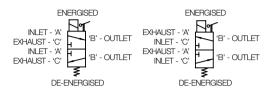
VIEW ON TOP WITH TOP COVER REMOVED 'A' PORT 8 'B' POR' IEXHAUS

CONDUIT CONNECTION SEE TABULATION

Profile and dimensions mm

Y123★★★★★★ **Option selector** Model Body / trim materials Substitute Substitute IC04S 316 SS / 316 SS Operating pressure Substitute 316L SS / 316L SS 0-20 bar Substitute 2 Voltage Port config. Substitute 18 / 33V DC Α 3/2 UNIVERSAL 3 **24V DC** В Operation Substitute 50V DC С Automatic Α 25V AC G Automatic latching lever B 110V AC С Push button manual override 240V AC М Push button manual reset Р 115V DC R Jack screw manual overrides S **Conduit connection** Substitute Tamperproof manual reset button Т M20 x 1.5 Process conn. Substitute 1/2" NPT 2 1/4" NPT A1 1/4" BSPP E1 Seat / seal materials Substitute High nitrile Н

ICO4S 1/4" 3/2 20 BAR (290 PSI) A-L-L



Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Valve size:

1/4" balanced poppet valve **Weight:** 5.5 kg

Materials:

Solenoid pot - stainless steel - BFC 316 Top cover - stainless steel -BFC 316 Valve body & trim materials -316 stainless steel - 316L

stainless steel to the valve body and trim materials O-rings seats & seals -high nitrile (NBR)

Seats - nylon 66 Coil insulation - class H

ICO4S 1/4" 3/2 20 BAR (290 PSI) JSMO



Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Valve size:

1/4" balanced poppet valve **Weight:** 6 kg

Materials:

Solenoid pot - stainless steel - BFC 316 Top cover - stainless steel -BFC 316

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim materials O-rings seats & seals -high nitrile (NBR)

Coil insulation - class H

ICO4S 1/4" 3/2 20 BAR (290 PSI) PBMR



Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Valve size:

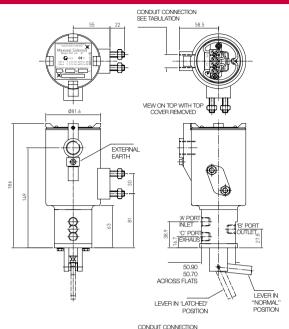
1/4" balanced poppet valve **Weight:** 5.5 kg

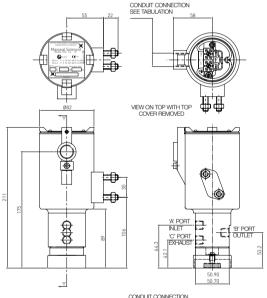
Materials:

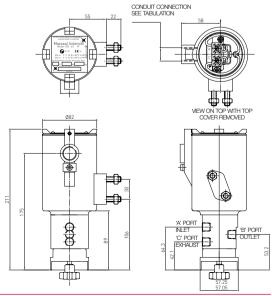
Solenoid pot - stainless steel - BFC 316 Top cover - stainless steel -BFC 316

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim materials O-rings seats & seals -high nitrile (NBR)

Coil insulation - class H







ICO4S 1/4" 3/2 20 BAR (290 PSI) PBMO



Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Weight: 5 kg

Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals - high

nitrile

Paint finish - stainless steel coil housing - unpainted

Electrical information

Voltage (nominal)	24V DC							
Response Times (Typ)	Pull-in < 150 MS Drop Out < 80 MS							
Coil Rating	125 ohms							
Voltage Protection	Surge suppression diodes fitted as STD							
Leak Performance	Bubble tight							
Pull-in Voltage	>= 87.5% of nominal							
Drop-Out Voltage	10 - 20% of	nominal						
Power Consumption	4.5 watts							
Coil Encapsulation	Class H							
Coil Duty Cycle	100%							

ICO4S 1/4" 3/2 20 BAR (290 PSI) TPMR



Temperature ratings:

Media (min/max): -20°C/120°C (-4°F/248°F) Ambient: must be used within 'T' class temperature ranges shown

Weight: 6.5 kg

Materials:

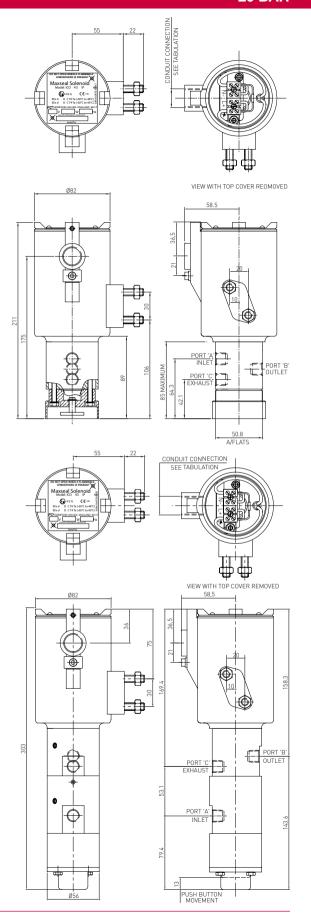
Valve body & trim - 316L stainless steel O-Rings seats & seals - high

nitrile

Paint finish - stainless steel coil housing - unpainted

Electrical information

Voltage (nominal)	24V DC						
Response Times (Typ)	Pull-in < 150 MS Drop Out < 80 MS						
Coil Rating	125 ohms						
Voltage Protection	Surge suppression diodes fitted as STD						
Leak Performance	Bubble tight						
Pull-in Voltage	>= 87.5% of nominal						
Drop-Out Voltage	10 - 20% of	nominal					
Power Consumption	4.5 watts						
Coil Encapsulation	Class H						
Coil Duty Cycle	100%						



Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only) Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure: 0-20 bar (0-290 psi) Flow rates:

 $C_{v} = 0.8$ USgpm for 1 psi Δp $K_{\nu} = 11.5 \text{ l/min for 1 bar (15 psi) } \Delta p$

Port size: 1/4"

Process connections: NPT

Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media:

Customer to specify and confirm

compatibility

Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal
Voltage Protection	Surge suppr	ession diodes fi	itted as STD		Coil Encapsulation	Class H
Leak Performance	Bubble tight				Coil Duty Cycle	100%

ICO4S 1/4" 3/2 20 BAR (290 PSI) IN AUTO **EXTREME SERVICE**



Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating: 60 ohms

Power Consumption:

9.5 watts Weight: 5.5 kg **Operation:** Automatic

Materials:

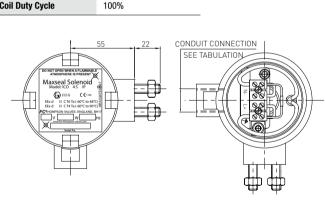
Valve body & trim - titanium O-Rings seats & seals - high nitrile

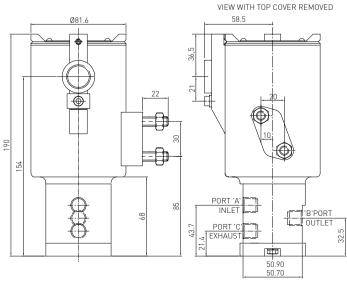
Paint finish - stainless steel coil housing - unpainted

Ordering information:

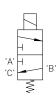
Quote: Y123AA1H1B3003 Options: Extreme service

(9.6 Watts)





ICO4S 1/4" 3/2 20 BAR (290 PSI) IN AUTO HIGH TEMP SPACER



Temperature ratings:

Media (min/max): -20°C/120°C (-4°F/248°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating:

125 ohms

Power Consumption:

4.5 watts Weight: 5 kg

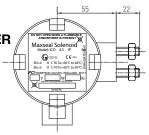
Operation: Automatic

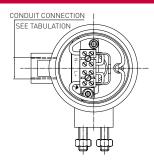
Materials:

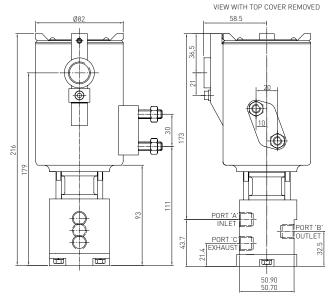
Valve body & trim - 316L stainless steel O-Rings seats & seals high nitrile Paint finish - stainless steel coil housing - unpainted

Ordering information:

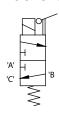
Quote: Y123AA1H1BS002 Options: High temperature







ICO4S 1/4" 3/2 20 BAR (290 PSI) EXTREME SERVICE A.L.L.



Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating: 60 ohms

Power Consumption:

9.6 watts

Weight: TBA Kg Operation:

Automatic latching lever

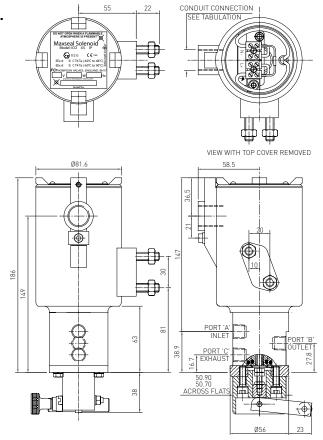
Materials:

Valve body & trim aluminium bronze O-Rings seats & seals high nitrile Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y123BA1H1BM017 Options: Extreme service

(9.6 watts)



ICO4S 1/4" 3/2 20 BAR (290 PSI) EXTREME SERVICE PBMO



Temperature ratings:

Media (min/max):
-20°C/90°C (-4°F/194°F)
Ambient: must be used
within 'T' class temperature
ranges shown

Coil Rating:

60 ohms

Power Consumption:

9.6 watts **Weight:** 5 kg **Operation:**

Push button manual override

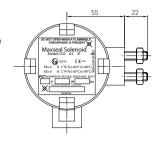
Materials:

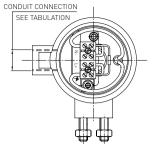
Valve body & trim aluminium bronze O-Rings seats & seals high nitrile

Paint finish - stainless steel coil housing - unpainted

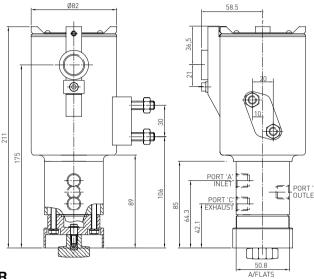
Ordering information:

Quote: Y123CA1H1BM003 Options: Extreme service (9.6 watts)





VIEW WITH TOP COVER REMOVED



ICO4S 1/4" 3/2 20 BAR (290 PSI) EXTREME SERVICE PBMR



Temperature ratings:

Media (min/max): -50°C/50°C (-58°F/122°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating:

1500 ohms

Power Consumption:

8 watts

Weight: 5 kg

Operation:

Push button manual reset

Materials:

Valve body & trim - 316L stainless steel

O-Rings seats - low nitrile

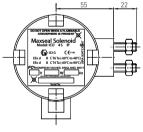
O-Rings seals -

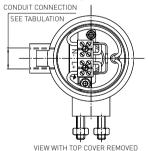
fluorosilicone

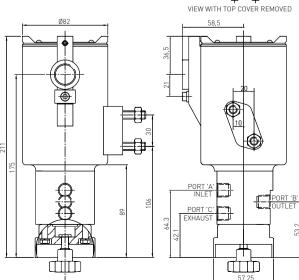
Paint finish - stainless steel coil housing - unpainted

Ordering information:

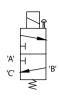
Quote: Y123PA1L1DS003 Options: Extreme service valve







ICO4S 1/4" 3/2 20 BAR (290 PSI) EXTREME SERVICE JSMO



Temperature ratings: Media (min/max):

-20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating:

60 ohms

Power Consumption:

9.6 watts

Weight:

7 kg

Operation:

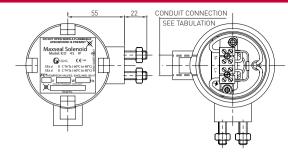
Jackscrew manual override

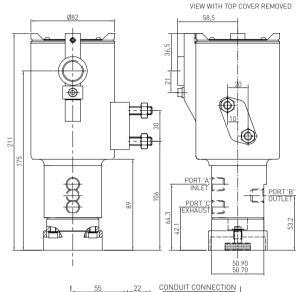
Materials:

Valve body & trim aluminium bronze O-Rings seats & seals high nitrile Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y123SA1H1BM003 Options: Extreme service (9.6 watts)





Maxseal Solenoid

ICO4S 1/4" 3/2 20 BAR (290 PSI) HIGH TEMP SPACER JSMO



Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating:

60 ohms

Power Consumption:

9.6 watts

Weight: 7 kg Operation:

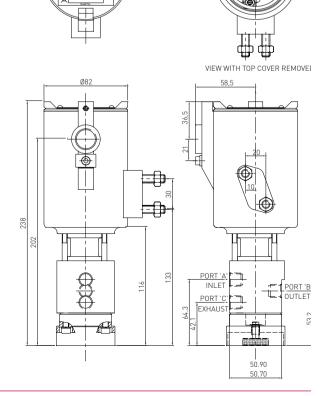
Jackscrew manual override

Materials:

Valve body & trim aluminium bronze O-Rings seats & seals high nitrile Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y123SA1H1BM003 Options: Extreme service (9.6 watts)





Model: ICO4S 1/4" 3/2 UNI Direct acting solenoid valve Low pressure, high flow

Max inlet pressure 50 bar (725 psi)

Reliable and long life, ideal for a one time installation Control of pneumatic or hydraulic operated equipment

ATEX, CSA, GOST K & R, IECEX and NEMA 4X

Technical features

Maximum inlet pressure: 50 bar (725 psi)

Flow rates:

 $C_v = 0.6 \text{ USgpm for 1 psi } \Delta p$ $K_v = 8.64$ l/min for 1 bar (15 psi) Δp

Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F)) Valve size: 1/4" balanced poppet valve

Process connections: 1/4" NPT, 1/2" BSP Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT

Media: Liquid & gases Weight: 5.5 kg Materials:

Solenoid pot - stainless steel - BFC 316 Top cover - stainless steel - BFC 316

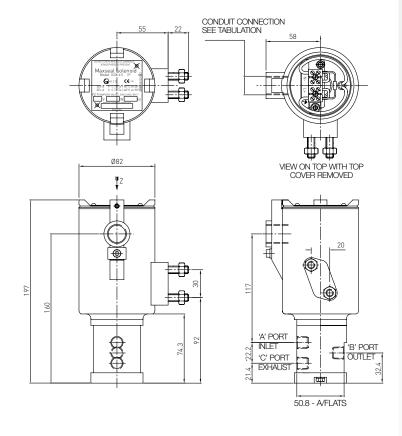
Valve body & trim materials -

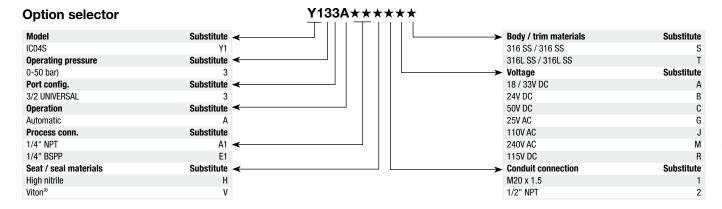
316 stainless steel - 316L stainless steel to

the valve body and trim materials O-rings seats & seals -high nitrile (NBR)

Coil insulation - class H







Direct acting solenoid valve

High pressure

Reliable and long life, ideal for a one time installation Control of pneumatic or hydraulic operated equipment ATEX, CSA, GOST K & R, IECEX and NEMA 4X

Technical features

Maximum inlet pressure:

207 bar (3002 psi)

Flow rates:

 $C_{\rm V}$ = 0.28 USgpm for 1 psi Δ p $K_{\rm V}$ = 4.03 l/min for 1 bar (15 psi) Δ p

Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Valve size:

1/4" balanced poppet valve

Process connections:

1/4" NPT, 1/2" BSP

Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT

Media: Liquid & gases

Weight: 5.5 kg

Materials:

Solenoid pot - stainless steel - BFC 316 Top cover - stainless steel - BFC 316 Valve body & trim materials -

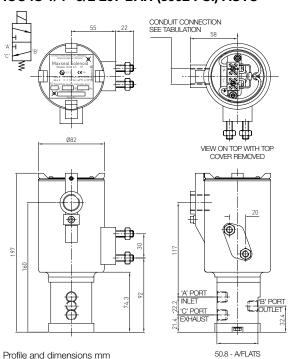
316 stainless steel - 316L stainless steel to the valve body and trim materials

O-rings seals - high nitrile (NBR)

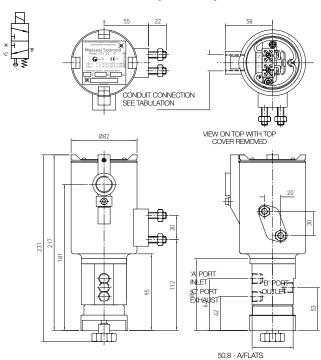
Seats - nylon 66 Coil insulation - class H

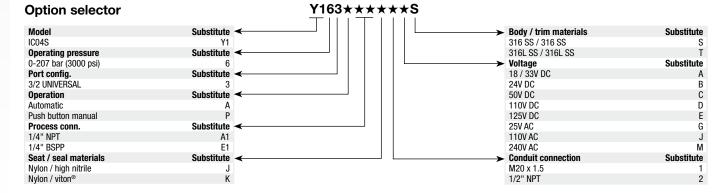


ICO4S 1/4" 3/2 207 BAR (3002 PSI) AUTO



ICO4S 1/4" 3/2 207 BAR (3002 PSI) PBMR





Model ICO4S 1/4" 3/2 UNI

Direct acting solenoid valve

High flow

Max inlet pressure 414 bar (6005 psi)

A direct acting solenoid operated valve for the control of pneumatic or hydraulic operated equipment

Reliable and long life, ideal for a one time installation

ATEX, CSA, GOST K & R, IECEX and NEMA 4X

Technical features

Maximum inlet pressure:

0 - 414 bar (0 - 6005 psi) - hydraulic/ 0 - 300 bar (0 - 4351 psi) - gas

Flow rates:

 $C_v = 0.28$ USgpm for 1 psi Δp $K_{c} = 4.03 \text{ l/min for 1 bar (15 psi) } \Delta p$

Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max -50°C/60°C (-58°F/140°F))

Valve size:

1/4" poppet valve

Process connections:

1/4" NPT, 1/2" BSP

Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT

Media: Liquid & gases

Weight: 5.5 kg **Materials**

Solenoid pot - stainless steel - BFC 316

Top cover - stainless steel -

BFC 316

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim

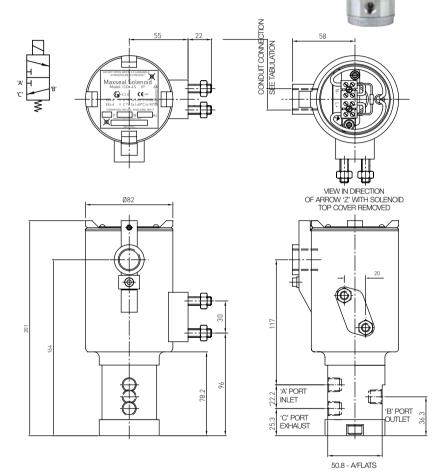
materials

O-rings & seals -high nitrile (NBR)

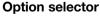
Seats - nylon 66

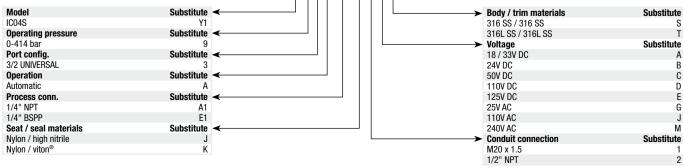
Coil insulation - epoxy resin

to class H



Profile and dimensions mm





Y193A★★★★★S



Model: ICO4S 1/4" 5/2 UNI

Direct acting solenoid valve

Low pressure, high flow

Max inlet pressure 20 bar (290 psi)

Reliable and long life, ideal for a one time installation

Control of pneumatic or hydraulic operated equipment

ATEX, CSA, GOST K & R, IECEX and NEMA 4X

Technical features

Maximum inlet pressure:

20 bar (290 psi)

Flow rates:

 $C_v = 0.8$ USgpm for 1 psi Δp $K_v = 11.5 \text{ l/min for 1 bar}$ (15 psi) ∆p

Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Valve size:

1/4" balanced poppet valve

Process connections:

1/4" NPT. 1/2" BSP

Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT

Media: Customer to specify and confirm compatibility

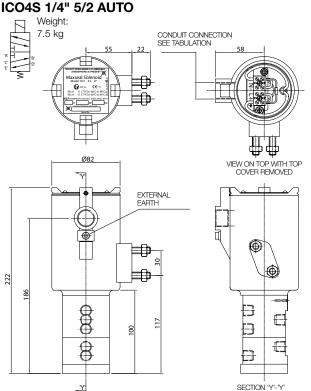
Materials:

Valve body & trim - 316L stainless steel

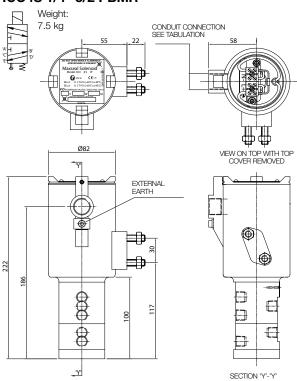
O-Rings seats & seals - high nitrile Paint finish - stainless steel coil

Profile and dimensions mm

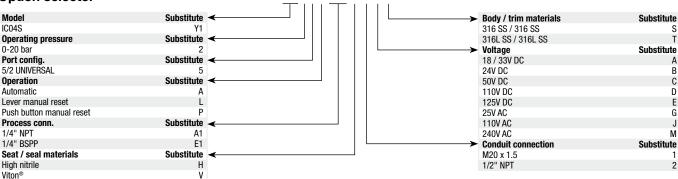
housing - unpainted



ICO4S 1/4" 5/2 PBMR



Option selector

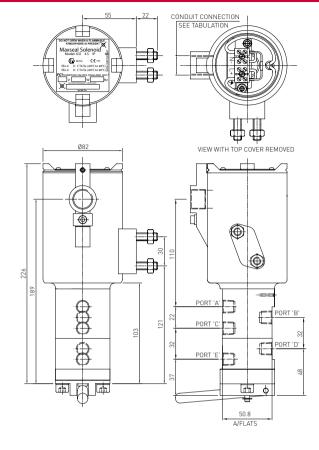


Y125*****

ICO4S 1/4" 5/2 20 BAR (290 PSI) LEVER MANUAL RESET



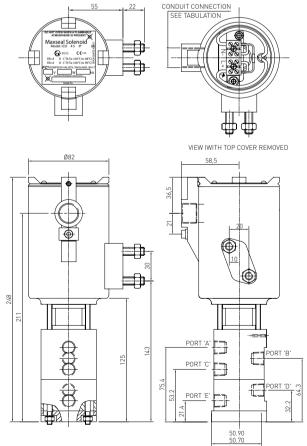
Weight: 5.5 kg Ordering information: Quote: Y125LA1H1DS



ICO4S 1/4" 5/2 20 BAR (290 PSI) HIGH TEMP SPACER AUTO



Weight: 6 kg Ordering information: Quote: Y125AA1H2BS002



3/2 universal

Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X



Max. inlet pressure: Conduit / Signal Conns: 0-20 bar (0-290 psi) M20 x 1.5mm IS0 (F) Port size: 3/8" Media:

Process connections: Customer to specify and confirm compatibility



Electrical information

Voltage (nominal)	24V DC	Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in < 150 MS Drop Out < 80 MS	Drop-Out Voltage	10 - 20% of nominal
Voltage Protection	Surge suppression diodes fitted as STD	Coil Encapsulation	Class H
Leak Performance	Bubble tight	Coil Duty Cycle	100%

IC04S 3/8" 3/2 20 BAR (290 PSI) AUTO

Flow rates:

 $C_v = 1.7 \text{ USgpm for 1 psi } \Delta p$ $K_{1} = 24.5 \text{ l/min for 1 bar}$ (15 psi) Δp

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F)

Ambient: must be used within 'T' class temperature ranges shown

Coil Rating:

38 ohms

Power Consumption: 15.1 watts

Weight: 5.5 kg **Operation:** Automatic

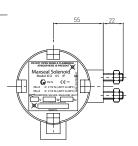
Materials:

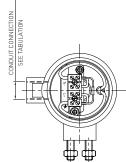
Valve body & trim - 316L stainless

O-Rings seats & seals - viton Paint finish - stainless steel coil housing - unpainted

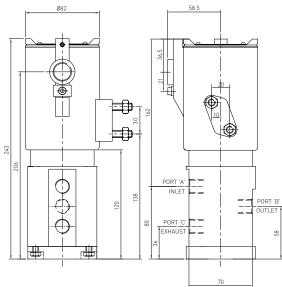
Ordering information:

Quote: Y123AA2V1BS Options: None



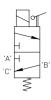


VIEW WITH TOP COVER REMOVED





ICO4S 3/8" 3/2 20 BAR (290 PSI) AUTO LATCHING LEVER



Temperature ratings:

Media (min/max): 0°C/60°C (32°F/140°F) Ambient: must be used

within 'T' class temperature ranges shown

Coil Rating: 38 ohms **Power Consumption:**

15.1 watts Weight: 7.5 kg Operation:

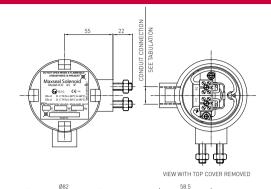
Automatic latching lever

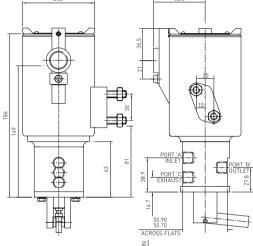
Materials:

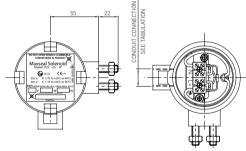
Valve body & trim aluminium bronze O-Rings seats & seals high nitrile

Paint finish - stainless steel coil housing - unpainted Ordering information:

Quote: Y123BA2H1BM Options: None



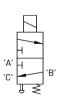




VIEW WITH TOP COVER REMOVED Ø82 58.5 265 PORT 'A' INLET PORT 'B' 160 142 PORT 'C' 102

70 A/FLATS

ICO4S 3/8" 3/2 20 BAR (290 PSI) PBMR



Flow rates:

 $C_v = 1.6 \text{ USgpm for}$ 1 psi ∆p $K_{r} = 24.5$ l/min for 1 bar . (15 psi) Δp

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Coil Rating: 125 ohms **Power Consumption:**

15.1 watts Weight: 4.5 kg Operation:

Push button manual reset

Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals high nitrile

Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y123PA2H1BS Options: None

Direct acting solenoid valve

Low pressure, high flow

Max inlet pressure 20 bar (290 psi)

Reliable and long life, ideal for a one time installation Control of pneumatic or hydraulic operated equipment ATEX. CSA. GOST K & R. IECEX and NEMA 4X

Technical features

Maximum inlet pressure:

20 bar (290 psi)

Temperature ratings:

Media (min/max -60°C/90°C (-76°F/194°F)) Ambient (min/max 0°C/60°C (32°F/140°F))

Conduit connection:

M20 x 1.5 conduit thread,

1/2" NPT

Media: Liquid & gases

Materials

Solenoid pot - stainless steel -BFC 316

Top cover - stainless steel -BFC 316

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim materials

O-rings seats & seals high nitrile (NBR) Coil insulation - class H

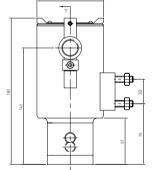
ICO4S 1/4" 2/2 AUTO



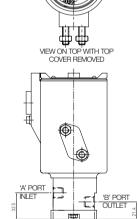
Flow rates:

 $C_{v} = 0.8$ USgpm for 1 psi Δp $K_{i} = 11.5 \text{ l/min for 1 bar (15 psi) } \Delta p$ Valve size: 1/4" balanced poppet valve Process connections: 1/4" NPT, 1/2" BSP

Weight: 5 kg CONDUIT CONNECTION SEE TABULATION . **(€**



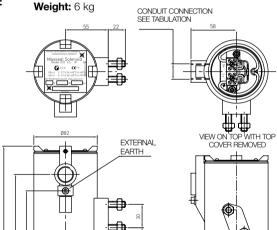
Profile and dimensions mm

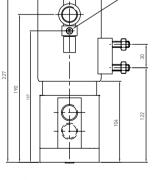


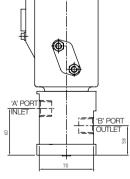
ICO4S 1/2" 2/2 AUTO

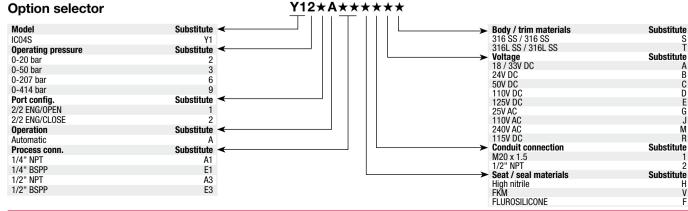
Flow rates: $C_v = 4.2 \text{ USgpm for 1 psi } \Delta p$ $K_{\nu} = 46 \text{ l/min for 1 bar (15 psi) } \Delta p$

Valve size: 1/2" balanced poppet valve Process connections: 1/2" NPT. 1/2" BSP











ICO4S 1/2" 2/2 20 BAR (290 PSI) IN AUTO PROXIMITY SWITCH



2/2 energise to open (normally closed)

Max. inlet pressure:

Max. inlet pressure 0-20 bar (0-290 psi)

Flow rates:

 $C_V = 4.2$ USgpm for 1 psi Δp K, = 60.9 l/min for 1 bar

(15 psi) Δp **Port size:** 1/2"

Coil Rating: 38 ohms Power Consumption:

15.1 watts

Process connections:

NPT

Weight: 8.5 kg **Operation:** Automatic

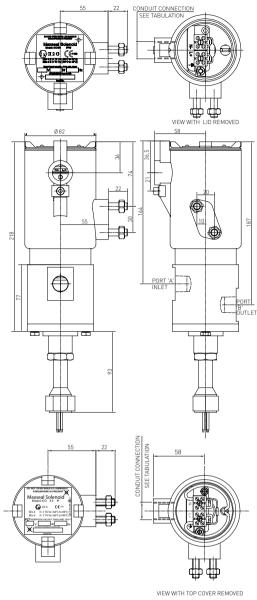
Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals high nitrile

Paint finish - stainless steel coil housing - unpainted **Ordering information:**

Quote: Y121AA3H1BS077 Options: Position switch topwrox go switch

model 73



ICO4S 1/2" 2/2 20 BAR (290 PSI) AUTO LATCHING LEVER



2/2 energise to open (normally closed)

Max. inlet pressure: 0-20 bar (0-290 psi)

Flow rates:

 $C_v = 4.2$ USgpm for 1 psi Δp $K_v = 60.9$ I/min for 1 bar

(15 psi) Δp **Port size:** 1/2" **Coil Rating:** 38 ohms **Power Consumption:**

15.1 watts

Process connections:

NPT

Weight: 7 kg **Operation:**

Automatic latching lever

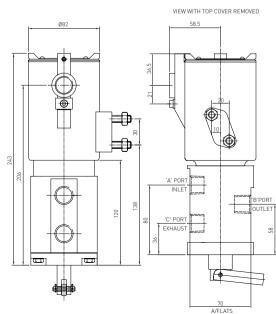
Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals - high nitrile

Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y121BA3H1BS Options: None



ICO4S 1/2" 2/2 50 BAR AUTO



2/2 energise to open (normally closed)

Max. inlet pressure: 0-50 bar (0-725 psi)

Flow rates:

 $C_v = 3.2 \text{ USgpm for}$ 1 psi ∆p

 $K_v = 50$ l/min for 1 bar (15 psi) ∆p Port size: 1/2"

Coil Rating: 38 ohms **Power Consumption:**

15.1 watts

Process connections:

NPT

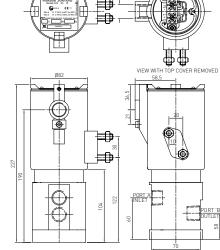
Weight: 8.5 kg **Operation:** Automatic

Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals high nitrile Paint finish - stainless steel

coil housing - unpainted Ordering information:

Quote: Y131AA3H1BS Options: None



ICO4S 1/2" 2/2 414 BAR (6005 PSI) AUTO



2/2 energise to open (normally closed)

Max. inlet pressure:

0-414 bar (0-6005 psi)

Flow rates:

 $C_v = 4.2 \text{ USgpm for}$ 1 psi ∆p

 $K_r = 60.5 \text{ l/min for 1 bar}$ (15 psi) ∆p

Port size: 1/2" Coil Rating: 38 ohms Power Consumption:

15.1 watts

Process connections:

NPT

Weight: 9 kg

Operation: Automatic

Materials:

Valve body & trim - 316L stainless steel O-Rings seats - nylon O-Rings seals - high nitrile Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y191AA3J1BS Options: None

ICO4S MANIFOLD MOUNT 2/2 AUTO 207 BAR (3002 PSI)



2/2 energise to close (normally open)

Max. inlet pressure:

0-207 bar (0-3002 psi)

Flow rates:

 $C_v = 0.28 \text{ USgpm for}$ 1 psi ∆p

 $K_{r} = 4 \text{ l/min for 1 bar}$ (15 psi) ∆p

Port size: 5mm drilled ports

Coil Rating: 60 ohms **Power Consumption:**

9.6 watts

Process connections: 5mm drilled ports

Weight: 5.5 kg **Operation:** Automatic

Materials:

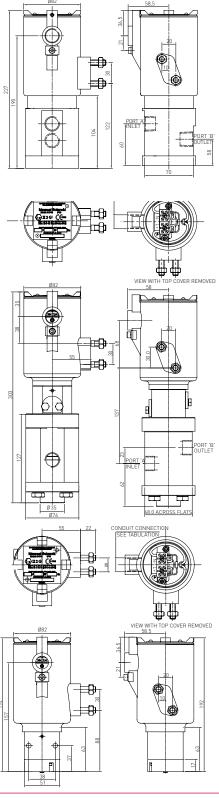
Valve body & trim - 316L stainless steel

O-Rings seats - nylon O-Rings seals - high nitrile

Paint finish - stainless steel coil housing - unpainted

Ordering information:

Quote: Y162AKFJ1BS Options: Manifold mount



Direct acting solenoid valve Low pressure, high flow Reliable and long life, ideal for a one time installation Control of pneumatic or hydraulic operated equipment ATEX, CSA, GOST K & R, IECEX and NEMA 4X

Technical features

Maximum inlet pressure:

20 bar (290 psi)

Temperature ratings:

Media (min/max -20°C/90°C (-4°F/194°F) Ambient (min/max 0°C/60°C (32°F/140°F)

Process connections:

1/2" NPT, 1/2" BSP

Conduit connection:

M20 x 1.5 conduit thread, 1/2" NPT

Media: Liquid & gases Weight: 7.5 kg

Materials:

Solenoid pot - stainless steel -

BFC 316

Top cover - stainless steel - BFC

316

Valve body & trim materials -316 stainless steel - 316L stainless steel to the valve body and trim

materials O-rings seats & seals -high nitrile

(NBR)

Coil insulation - class H

ICO4S 1/2" 3/2 AUTO

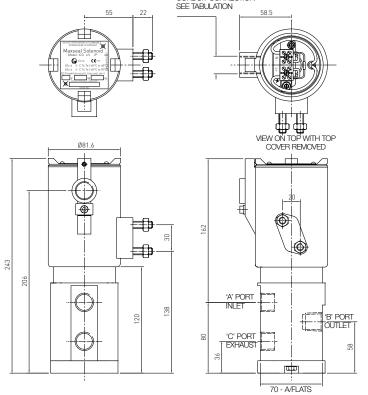


Flow rates:

 $C_v = 4.2 \text{ USgpm for 1 psi } \Delta p$

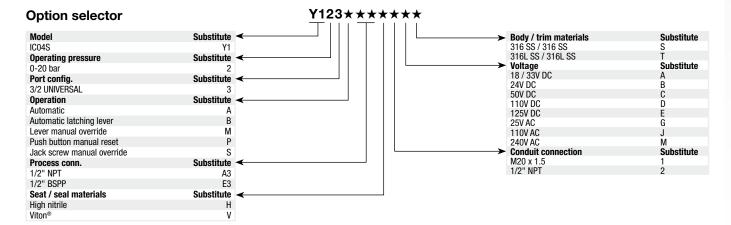
 $K_v = 46 \text{ l/min for 1 bar (15 psi) } \Delta p$





CONDUIT CONNECTION

Profile and dimensions mm



ICO4S 1/2" 3/2 A-L-L



Flow rates:

 $C_V = 4.2$ USgpm for 1 psi Δp $K_V = 46$ l/min for 1 bar

(15 psi) ∆p Valve size:

1/2" balanced poppet valve

ICO4S 1/2" 3/2 PBMR



Flow rates:

 $C_{_{V}}=4.2$ USgpm for 1 psi Δp $K_{_{V}}=46$ l/min for 1 bar (15 psi) Δp

Valve size:

1/2" balanced poppet valve

ICO4S 1/2" 3/2 JSMO

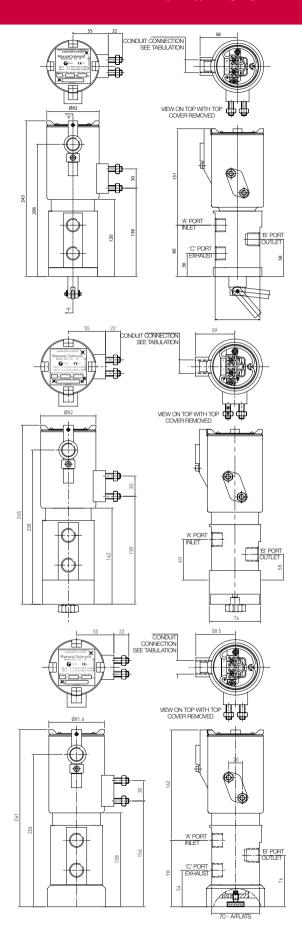


Flow rates:

 $C_{_{V}}$ = 4.2 USgpm for 1 psi Δp $K_{_{V}}$ = 46 l/min for 1 bar (15 psi) Δp

Valve size:

1/2" balanced poppet valve



3/2 universal

Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

& ILO 00079-1.2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure:

0-20 bar (0-290 psi)

Flow rates:

 $C_v = 4.2$ USgpm for 1 psi Δp $K_v = 60.9$ l/min for 1 bar (15 psi) Δp

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Port size: 1/2"

Process connections: NPT Conduit / Signal Conns: M20 x 1.5mm IS0 (F)

Media:

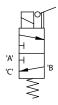
Customer to specify and confirm compatibility

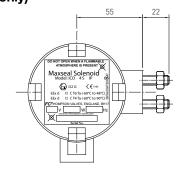
Weight: 8.5 kg
Materials:

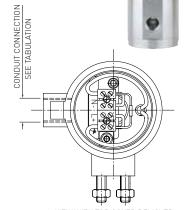
Valve body & trim - 316L stainless steel O-Rings seats & seals - high nitrile Paint finish - stainless steel coil housing unpainted

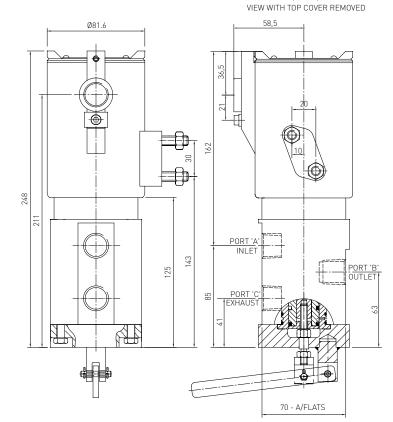
Ordering information:

Quote: Y123MA3H1BS Options: None









Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal
Coil Rating	38 ohms				Power Consumption	15.1 watts
Voltage Protection	Surge suppre	ession diodes fi	tted as STD		Coil Encapsulation	Class H
Leak Performance	Bubble tight				Coil Duty Cycle	100%



3/2 3-port / 2-way not suitable for universal opn

Certification EExd IIC T6 (Tamb = -60°C to +48°C (-76°F to +118°F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000

& IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure:

0-20 bar (0-290 psi)

Flow rates:

 $C_v = 4.2 \text{ USgpm for 1 psi } \Delta p$ $K_{\nu} = 60.9 \text{ l/min for 1 bar (15 psi) } \Delta p$

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Port size: 1/2"

Process connections: NPT Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media:

Customer to specify and confirm compatibility

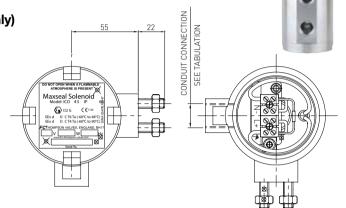
Weight: 7.5 kg Materials:

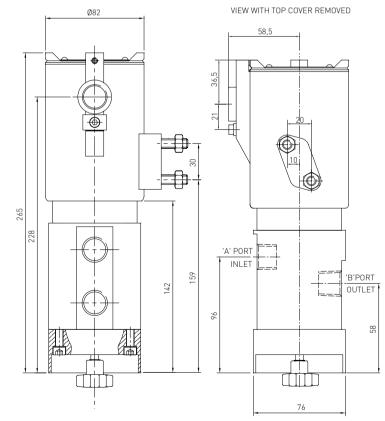
Valve body & trim - 316L stainless steel O-Rings seats & seals - high nitrile Paint finish - stainless steel coil housing unpainted

Ordering information:

Quote: Y123PA3H1BS Options: None







Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal
Coil Rating	125 ohms				Power Consumption	6 watts
Voltage Protection	Surge suppre	ession diodes fi	tted as STD		Coil Encapsulation	Class H
Leak Performance	Bubble tight				Coil Duty Cycle	100%

3/2 3-port / 2-way not suitable for universal opn

Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure:

0-50 bar (0-725 psi)

Flow rates:

 $C_{v} = 3.2 \text{ USgpm for 1 psi } \Delta p$ $K_{i} = 50 \text{ l/min for 1 bar (15 psi) } \Delta p$

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F)

Ambient: must be used within 'T' class

temperature ranges shown

Port size: 1/2"

Process connections: NPT

Conduit / Signal Conns: M20 x 1.5mm IS0 (F)

Media:

Customer to specify and confirm compatibility

Weight: 7.5 kg **Operation:** Automatic

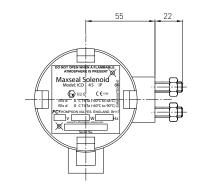
Materials:

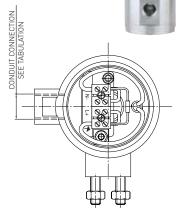
Valve body & trim - 316L stainless steel O-Rings seats & seals - high nitrile Paint finish - stainless steel coil housing unpainted

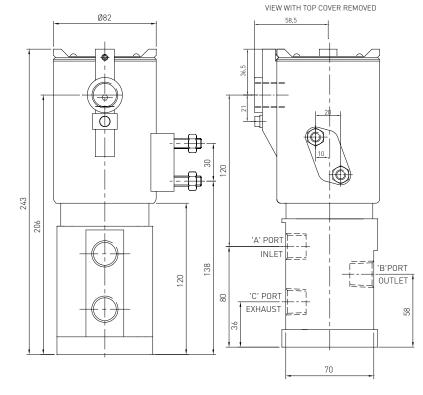
Ordering information:

Quote: Y133AA3H1BS Options: None









Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal
Coil Rating	38 ohms				Power Consumption	15.1 watts
Voltage Protection	Surge suppre	ession diodes fi	tted as STD		Coil Encapsulation	Class H
Leak Performance	Bubble tight				Coil Duty Cycle	100%

Drop Out

< 80 MS

Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only) Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure: 0-12 bar (0-174 psi)

Flow rates:

 $C_{v} = 2.1 \text{ USgpm for 1 psi } \Delta p$ $K_{\nu} = 30.2 \text{ l/min for 1 bar (15 psi) } \Delta p$ Port size: 1/2"

Process connections: NPT Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media: Customer to specify and confirm compatibility

Weight: TBA kg

ICO4S 1/2" 5/2 12 BAR (174 PSI) AUTO



Temperature ratings: Media (min/max):

-50°C/90°C (-58°F/194°F) Ambient: must be used within 'T' class temperature ranges shown

Voltage (nominal): 24V DC Coil Rating: 60 ohms **Power Consumption:**

9.6 watts

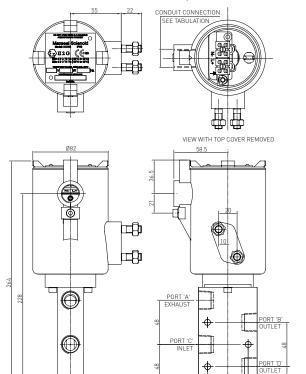
Profile and dimensions mm

Operation: Automatic Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals - nitrile Paint finish - stainless steel coil housing - unpainted

Ordering information: Quote: Y115AA3H1BS

Options: None



PORT 'E

ICO4S 1/2" 5/2 12 BAR (174 PSI) PBMR

Electrical information

Pull-in

Bubble tight

Class H

100%

>= 87.5% of nominal

10 - 20% of nominal

< 150 MS

Surge suppression diodes fitted as STD

Response Times (Typ)

Voltage Protection

Leak Performance

Pull-in Voltage

Drop-Out Voltage

Coil Encapsulation

Coil Duty Cycle



Temperature ratings:

Media (min/max): -30°C/80°C (-22°F/176°F)

Ambient: must be used within 'T' class temperature ranges

Voltage (nominal): 110V DC Coil Rating: 2600 ohms **Power Consumption:**

4.7 watts

Operation:

Push button manual reset

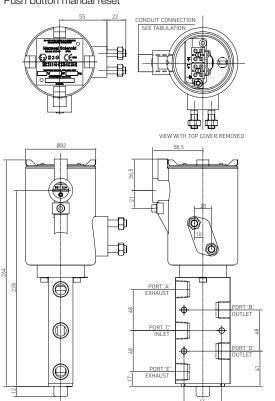
Materials:

Valve body & trim - 316L stainless steel O-Rings seats & seals high nitrile

Paint finish - stainless steel coil housing - unpainted Ordering information:

Quote: Y115PA3H1DS

Options: None



3/2 universal

Certification EExd IIC T6 (Tamb = -60° C to $+48^{\circ}$ C (-76° F to $+118^{\circ}$ F)) or EExd IIC T4 (Tamb = -60° C to $+90^{\circ}$ C (-76° F to $+194^{\circ}$ F)).

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure:

0-12 bar (0-174 psi)

Flow rates:

 $C_v = 6$ USgpm for 1 psi Δp

 $K_{v} = 86.2 \text{ l/min for 1 bar (15 psi) } \Delta p$

Temperature ratings:

Media (min/max): -55°C/90°C (-67°F/194°F) Ambient: must be used within 'T' class

temperature ranges shown

Port size: 3/4"

Process connections: NPT Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media:

Customer to specify and confirm compatibility

Weight: 7.2 kg
Operation: Automatic

Materials:

Valve body & trim - 316L stainless steel

O-Rings seats - N70C NBR O-Rings seals - high nitrile

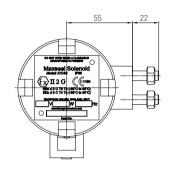
Paint finish - stainless steel coil housing -

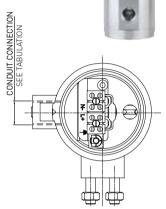
unpainted

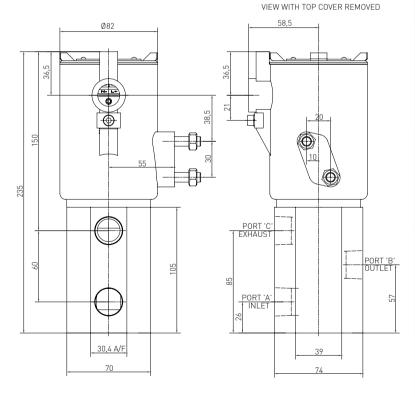
Ordering information:

Quote: Y113AA5H1BS Options: None









Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal
Coil Rating	38 ohms				Power Consumption	15.1 watts
Voltage Protection	Surge suppression diodes fitted as STD				Coil Encapsulation	Class H
Leak Performance	Bubble tight				Coil Duty Cycle	100%



3/2 3-port / 2-way not suitable for universal opn

Certification EExd IIC T6 (Tamb = -60°C to +48°C (-76°F to +118°F)) or EExd IIC T4 $(Tamb = -60^{\circ}C \text{ to } +90^{\circ}C (-76^{\circ}F \text{ to } +194^{\circ}F)).$

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure:

0-207 bar (0-3002 psi)

Flow rates:

 $C_{v} = 0.28$ USgpm for 1 psi Δp $K_v = 4 \text{ l/min for 1 bar}$ (15 psi) ∆p

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F)

Ambient: must be used within 'T' class temperature ranges shown

Process connections:

5mm drilled ports

Conduit / Signal Conns:

M20 x 1.5mm ISO (F)

Media: Customer to specify and

confirm compatibility Weight: 5 kg

Materials: Valve body & trim -316L stainless steel O-Rings seats - nylon

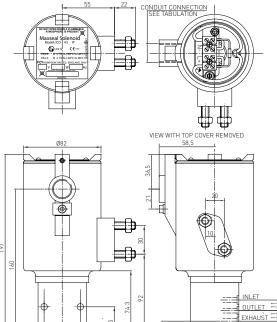
O-Rings seals - high nitrile Paint finish - stainless steel coil

housing - unpainted

ICO4S MANIFOLD MOUNT 3/2 AUTO 207 BAR (3002 PSI)



Port size: 5 mm drilled ports **Operation:** Automatic Ordering information: Quote: Y163AKFJ1BS Options: Manifold mount

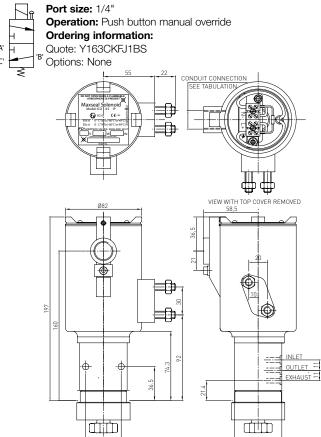


Electrical information

Licotrical information							
Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal	
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal	
Coil Rating	60 ohm	S			Power Consumption	9.6 watts	
Voltage Protection	Surge suppression diodes fitted as STD				Coil Encapsulation	Class H	
Leak Performance	Bubble tight				Coil Duty Cycle	100%	

49.0 A/F

ICO4S MANIFOLD MOUNT 3/2 PBMO 207 BAR (3002 PSI)



Certification EExd IIC T6 (Tamb = -60°C to +48°C (-76°F to +118°F)) or EExd IIC T4 $(Tamb = -60^{\circ}C \text{ to } +90^{\circ}C (-76^{\circ}F \text{ to } +194^{\circ}F)).$

Complies with EN 50014:1997 (amendments 1 & 2) and EN 50018:1994.

Atex certification SIRA 00ATEX1147, complies with ATEX directive 94/9/EC

IECEx certification IECEx BAS 04.0019, complies with IEC 60079-0:2000 & IEC 60079-1:2001

SIL 3 or SIL 4 (SIL 4 in a redundant configuration only)

Protection IP66/X8, NEMA 4X

Technical features

Max. inlet pressure:

0-414 bar (0-6005 psi)

Flow rates:

 $C_v = 0.28$ USgpm for 1 psi Δp $K_{ij} = 4 \text{ l/min for 1 bar}$ (15 psi) ∆p

Temperature ratings:

Media (min/max): -20°C/90°C (-4°F/194°F)

Ambient: must be used within 'T' class temperature ranges shown

Process connections:

5 mm drilled ports

Conduit / Signal Conns:

M20 x 1.5mm IS0 (F)

Media: Customer to specify and

confirm compatibility Weight: 5.5 kg

Materials: Valve body & trim -316L stainless steel O-Rings seats - nylon O-Rings seals - high nitrile

Paint finish - stainless steel coil

housing - unpainted

ICO4S MANIFOLD MOUNT 3/2 AUTO 414 BAR (6005 PSI)



3/2 norm (414B hyd / 300B gas (6004 psi hvd / 4351 psi gas)) 3/2 uni (300B hyd/150B gas (4351 psi hyd/2176 psi gas))

Port size: 1/4" Coil Rating: 38 ohms

Power Consumption:

15.1 watts

Operation:

Automatic Ordering information: Quote: Y193AKFJ1BS

Options: Manifold mount



(6005 PSI)

3/2 norm (414B hvd / 300B gas (6004 psi hyd / 4351 psi gas)) 3/2 uni (300B hyd/150B gas (4351 psi 'B' hyd/2176 psi gas))

ICO4S MANIFOLD MOUNT 3/2 JSM0 414 BAR

Port size: 5 mm drilled ports Coil Rating: 780 ohms

Power Consumption:

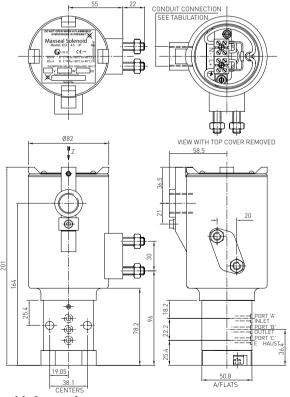
15.5 watts

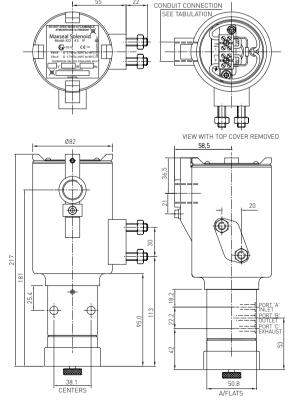
Operation:

Jackscrew manual override

Ordering information:

Quote: Y193SKFJ1DS Options: Manifold mount





Electrical information

Voltage (nominal)	24V DC				Pull-in Voltage	>= 87.5% of nominal
Response Times (Typ)	Pull-in	< 150 MS	Drop Out	< 80 MS	Drop-Out Voltage	10 - 20% of nominal
Voltage Protection	Surge s	uppression	diodes fitte	d as STD	Coil Encapsulation	Class H
Leak Performance	Bubble tight				Coil Duty Cycle	100%

A/FLATS

ICO4S MANIFOLD MOUNT 3/2 LM0 414 BAR (6005 PSI)



3/2 norm (414B hyd / 300B gas (6004 psi hyd / 4351 psi gas)) 3/2 uni (300B hyd/150B gas (4351 psi hyd/2176 psi gas))

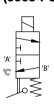
Port size: 5 mm drilled ports Coil Rating: 38 ohms **Power Consumption:**

15.1 watts

Operation: Lever manual override

Ordering information: Quote: Y193MKFJ1BS Options: Manifold mount

ICO4S MANIFOLD MOUNT 3/2 LMR 414 BAR (6005 PSI)



3/2 3-port / 2-way not suitable for universal opn

Port size:

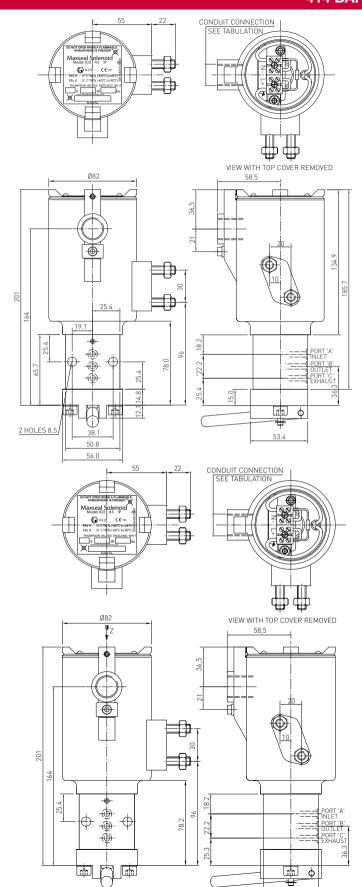
5 mm drilled ports Coil Rating: 125 ohms **Power Consumption:**

6 watts

Process connections: 5mm drilled ports-flg mtd

Operation:

Lever manual reset Ordering information: Quote: Y193LKFJ1BS Options: Manifold mount



Inlet - outlet - exhaust

Certification: No "T" class rating applicable for quick exhaust valves or Ambient temperature indentical to media temperatures

Atex certification none, not applicable

Technical features

Max. inlet pressure: 0.5-12 bar (7-174 psi) Temperature ratings:

Media (min/max): -50°C/80°C (-58°F/176°F)

Ambient: must be used within 'T' class temperature ranges shown Process connections: NPT

Conduit / Signal Conns: None

Media:

Customer to specify and confirm compatibility

Operation: Automatic

Leak Performance:

Bubble tight

Materials:

Valve body & trim - 316L stainless

O-Rings seats & seals - nitrile Paint finish - stainless steel construction - unpainted

47.0



QEV 1/4"



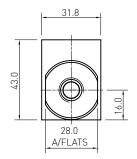
Flow rates:

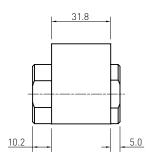
 $C_{v} = 1.6/2.1 \text{ USgpm for}$ 1 psi ∆p $K_v = 23.2/30.5 \text{ l/min for}$ 1 bar (15 psi) Δp

Port size: 1/4" Weight: 0.35 kg Ordering information:

Quote: QEV13AA1H00S

Options: None





45.8

16.5



QEV 1/2"



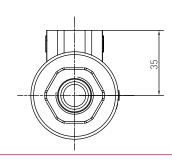
Flow rates:

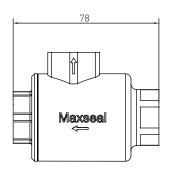
 $C_{v} = 6.4/5.5 \text{ USgpm for 1}$ psi Δp

Options: None

 $K_v = 92.8/79.8 \text{ l/min for}$ 1 bar (15 psi) ∆p Port size: 1/2"

Weight: 0.55 kg Ordering information: Quote: QEV13AA3H00S







QEV 3/4"



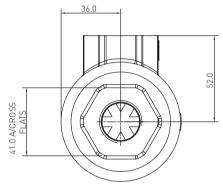
Flow rates:

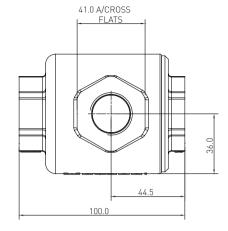
 $C_{v} = 10.4/10.8 \text{ USgpm for}$ 1 psi ∆p

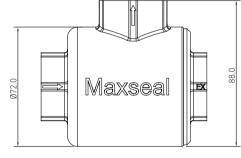
 $K_v = 149 \text{ l/min for 1 bar}$

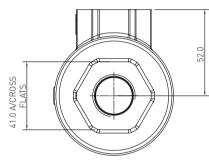
(15 psi) ∆p Port size: 3/4" Weight: 1.48 kg Ordering information: Quote: QEV13AA5H00S

Options: None









QEV 1"



Flow rates:

 $C_{v} = 10.4/15.4 \text{ USgpm for}$

1 psi ∆p

Port size: 1" Weight: 1.48 kg Ordering information: Quote: QEV13AA6H00S

