

THE MINI-300 SERIES

q m m q b m

q nb q m M

Issue B
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1. Description

M 300 is a 'compact' single stage piston sensed pressure regulator, capable of a
m m m m a 20mm 'Low Pressure' sensor and also an 8mm 'High Pressure'
m q v q q (mv b mq q q
q q q (m v b mq q q
q b m v m M m b
q q q :
m m b m q m m q q b m
m mv b v m m q m m mv b v b :

2. Installation

q x q qb m x q q
m q v mmq b mq m
q q b m m q b m q q q m x b m v
m b m qm b x m b b v :
B b m qq q nb m q q q q m b v
m mq q m :
x m b q q q nx m qb m m m mx q m
q q q m m b mm q q q q q m
q q q b m b b x qm q
q q q qm q q b :
m m q q b qx q : b b q b m x b mm b m
m q q v b q m b m q q q m q q
Standard Pipe (BSPP) 'B' and National Pipe Thread (NPT) 'N' options are available om
q q b q b v x q m q b mm b m b m qm
q q b m : q M q m q b q b x
m x m v q m x q m q b m q m b q
m b m b m b v q q :

mx q m q qv " NPT unless otherwise stated. If any gauge port
m q q m q q q q m m

((B : : q B m

3. Operation

qnm m b m b b v b q qm v b m qn m
m m v m q q q q b m
q q m m ϕ x b q qm: mbq
q q m v x m q q q b :

q b q q m b m qn m b b v
v v m qv m m v m q q q

q q q v mbq m q q: m b
m m q q q qv b q m b m q q
:

4. Special Conditions for Safe Use

M q q m m m m x q q q q q
q b x m m v m q q qv m x qnm m
b m m b b v :

5. Hazardous Location Usage

m m m m b q b b x q m m x
q m b m m m q m m mb q m
q b: q v q b m b m m q m m v q q
x m x q m q m x q
b m b m m m q m m B:

6. Servicing and Maintenance

q b m m m m mb v q m M q q mx q q q
x q m m m q m m q m m q b m m : x b
m q q q b m v q q m m m q
q q q x v q m m q q v q q m v m
m x b mb qn q m m m b mb : mx mb q mx
b q v q q b q v q m m q q

q q b qb m q F qm q b m:

q q b mb m q b m q

m m q q
qm m b q x qnm m b m x
m b b v qb q m x q
b m m m b

m q q q b m v m q m q q m
 mx v m m q q b m m m m q q x q
 b m m q q b m m m v b x q m q q q

6.1. Servicing the MINI-300 (LP)

M q q n b q v m m q b m

6.1.1. Accessing the Main Valve Assembly

bb m x (

: V q x (b q m b m mm (

m v q n b m q m m V (x v m m

b b v (*Ref. 6.1.2)

: q q m (q m (q m (

m q (q x

: M (b m m q m b

: m (m m q m (q x

: x m b m m (q m q b q b

: b m q m (m m (m b m

q x (

: b M (v m v q m (m b q m

m b m

: b q m (m m q (m m m q q

x (

: b q m (q q m (m q m (m

m q (

: b q v mm (m x m m q v q n b v

m m b m m M

q b m q m q q q : mx b q q q m

q b : q b m m m v

q q m : v m q x q q q q

m m q q m q q m m q m q q m

b q q q

m q m x m b q b x m b x m x

q q q q q q q M B :

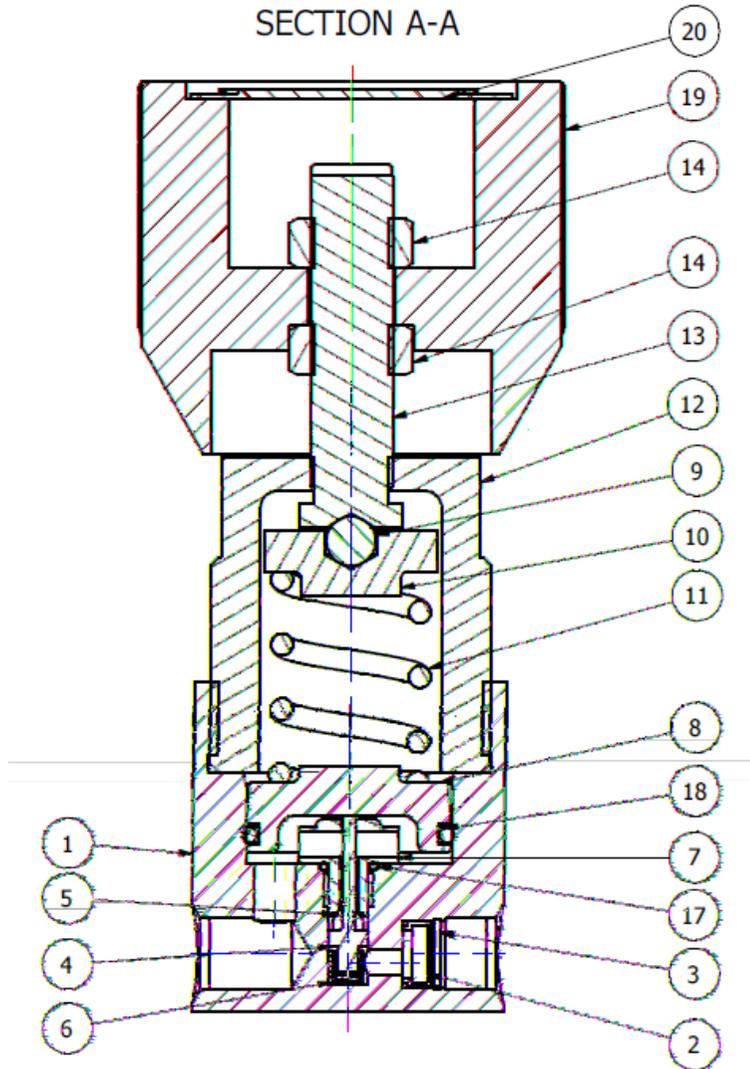
6.1.2. Adjusting the Set Point

m q b m q m b α (q m V q m q b v
 b m q q q q m
 v m q b m v

 : M (m B q m V (m m
 b M (b m V m q x m m
 b q v (
 : B m m b b q q b m m m q q m q
 m x q q q b q q b
 : V q x (b q m b x V q m
 q q V (m q q
 : B m m b q b q q q q q
 q q q q : q q m m m m m q m
 v q q q v m q q q
 : m b q v q q q m b q v (b b v m
 q m m q b
 : m q q x x v m v q q q m m

 : V q q b q v q b M (
 m b q v (m m m (
 : m m V (m b M (: m q b M
 m m V b m
 : m b m b M (m m V (m m x m
 m m b m m b q
 : m v m m V (b m m m v
 m x q m m x m b b v q m q b m m
 m m (
 : m q b M (b m x m m b q m
 m
 : q m m m V (m v q m m b q v (
 v b v b m q q q
 : q m m V b b v m q b m m b b
 q q q q b q b :
 : m m b q b q : :
 : b q q v m q x m m q q q m
 m m q m m V m b b v m q qb
 : B m M (b m m v b m m V (:
 m q m q m m M (m b b q m b v
 q q q q

6.1.3. Figure 1 – Sectional View of the MINI-300 (LP)



PARTS LIST		
ITEM	PART NUMBER	DESCRIPTION
1	PT-MINI-300-N-SS	1/8" NPT BODY
2	FILT-SCRM3803040S	8MM DIA SCREEN FILTER
3	CIRCLIP-DIN472-8MM	CIRCLIP
4	PT-C-001-013	MAIN VALVE WITH SQUARE
5	PT-C-002-011	PCTFE SEAT (210BAR)
6	PT-C-006-002	MAIN VALVE COMPRESSION SPRING
7	PT-C-007-002	SEAT Cv 0.06
8	PT-MINI-300-005	SENSOR 25MM
9	BALL-006-SS-316	6MM BALL BEARING
10	PT-MINI-300-003	SPRING REST LP
11	PT-C-011-009	LOAD SPRING
12	PT-MINI-300-004	BONNET
13	PT-C-019-003	ADJUSTING SCREW
14	PT-C-020	LOCKNUTS
17	OR-0050-10	O' RING STD
18	OR-BS020	O' RING STD
19	PT-C-021	SMALL HANDWHEEL
20	PT-C-022	NAMEPLATE

7. Technical Data

b m q b m b v q

m q q q (v B (

q q m q (v q q M(

q q q (q q M(

q m q q B B

q x m q

B

v B b x B (: m : m : (

F

q q v q m

m q q q m x q m B q q

8. Warranty Statement

q q b q m q b b q m v q b b m

q m v b m v q m q v m mb m m q

v q m b m m v q q b q q m q

q:

Annex A. The 310 – ‘Solid Disk’ Main Valve Design

A.1. Description

The ‘solid disk’ type main valve assembly was introduced as an alternative to the unique ‘cone type’ assembly and could be applied where greater resistance to both temperature

The model number ‘310’ was assigned to denote the requirement for the new disk type

A.2. Servicing

A.2.1. Figure 2 – Detail A: The 310 ‘Solid Disk’ MVA (sectional)

A.2.2. Figure 3 – Exploded View of the 310 ‘Solid Disk’ MVA

