



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

TI-P357-25  
CH Issue 3

## PN1000 and PN2000 Pneumatic Actuators

### Closing Pressures for 5" to 8" 'C' Series Valves

#### 'C' series valve

Valve size	5" DN125	6" DN150	8" DN200
Standard travel in inches and (mm)	2½" (65)		3" (75)
Equal % C <sub>V</sub> (US) and K <sub>VS</sub> in brackets	293 (250)	386 (330)	560 (480)

#### Maximum differential pressures (bar) - UNBALANCED valves controlled by positioner

##### Class IV and VI shut-off with PTFE chevron or graphite seal.

For extended bonnets and bellows seal read 'PTFE' or 'graphite' depending on seal chosen.

Actuator	Spring range		Minimum air pressure bar g		Positioner required	Maximum differential pressure (bar) for standard valve trim with either graphite or PTFE stem seal					
	Spring extend PN1000	Spring retract PN2000	Spring extend PN1000	Spring retract PN2000		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
PN_300	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_400	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_500	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_600	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_700	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	4	4	3	2	-	-
PN_300	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_400	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_500	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_600	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	6	6	4	4	2	2
PN_700	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	12	12	8	8	5	4
PN_300	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_400	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_500	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_600	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	14	14	10	9	5	5
PN_700	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	27	26	18	18	10	10

#### Maximum differential pressures (bar) - BALANCED valves controlled by positioner

##### Class IV shut-off with PTFE chevron or graphite seal.

For extended bonnets and bellows seal read 'PTFE' or 'graphite' depending on seal chosen.

Actuator	Spring range		Minimum air pressure bar g		Positioner required	Maximum differential pressure (bar) for standard valve trim with either graphite or PTFE stem and plug seal					
	Spring extend PN1000	Spring retract PN2000	Spring extend PN1000	Spring retract PN2000		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
PN_300	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_400	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_500	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_600	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	20	-	-	-	-	-
PN_700	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	83	59	58	36	28	9
PN_300	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_400	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_500	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_600	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	103	103	103	81	59	40
PN_700	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	103	103	103	103	103	103
PN_300	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_400	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_500	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	103	103	103	103	103	85
PN_600	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	103
PN_700	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-

Note: For reduced trims use the equivalent trim diameter. See overleaf for Class V shut-off.

## 'C' series valve

Valve size	5" DN125	6" DN150	8" DN200
Standard travel in inches and (mm)	2½" (65)		3" (75)
Equal % C <sub>V</sub> (US) and K <sub>VS</sub> in brackets	293 (250)	386 (330)	560 (480)

### Maximum differential pressures (bar) - UNBALANCED valves controlled by positioner

#### Class V shut-off with PTFE chevron or graphite seal.

For extended bonnets and bellows seal read 'PTFE' or 'graphite' depending on seal chosen.

Actuator	Spring range		Minimum air pressure bar g		Positioner required	Maximum differential pressure (bar) for standard valve trim with either graphite or PTFE stem seal					
	Spring extend PN1000	Spring retract PN2000	Spring extend PN1000	Spring retract PN2000		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
PN_300	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_400	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_500	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_600	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_700	0.4 - 1.2	0.2 - 1.0	1.4	1.4	Yes	-	-	-	-	-	-
PN_300	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_400	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_500	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_600	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	-	-	-	-	-	-
PN_700	1.0 - 2.0	0.2 - 1.0	2.2	2.0	Yes	6	6	3	3	-	-
PN_300	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_400	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_500	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_600	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	-	-	-	-	-	-
PN_700	2.0 - 4.0	0.2 - 1.0	4.2	3.0	Yes	20	20	13	13	-	-