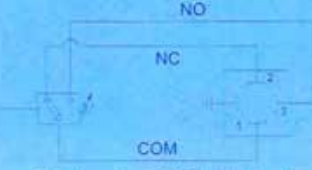




PRESSURE SWITCH

DIMENSIONS

Graphic Symbol



NC clamp 1 - 2, NO lamp 1 - 3

Switching capacity

Series:DNL
 125VAC,5A/3A ; 250VAC,3A/2A
 14VDC,5A/4A ; 30VDC,4A/3A

Series:DNA,DNB,DNC,DNF,DNK,DNM,DNS
 125VAC,3A/1A ; 250VAC,3A/0.5A
 14VDC,3A/1.5A ; 30VDC,2A/1A

Pressure range

Model	040K	050K	070K	100K	150K	200K	250K	280K	360K	400K
DNA	■			■			■		■	
DNB	■		■		■		■			
DNC	■		■		■		■			
DNF	■			■			■		■	
DNK		■		■	■		■			
DNL		■		■		■		■		
DNM(B)	■			■			■			
DNS(B)	■			■			■		■	

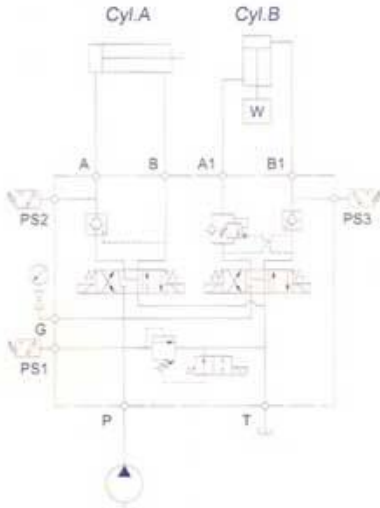
Characteristics

- Mounting position-unlimited.
- Material-body casting-iron,element steel.
- Construction-position type,spring loaded.
- No. drain line.
- Long service life.
- Recommended max. operations 20 per minute.
- Compact and robust with direct pres. read-out.

HYSTAR HYDRAULIC Means:

- Improved design and quality.
- Compact structure with.
Carefully picked material.
- Attractive.

Pressure Switches

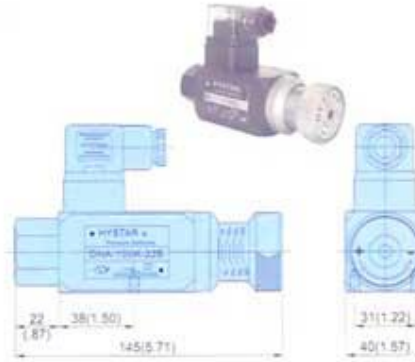
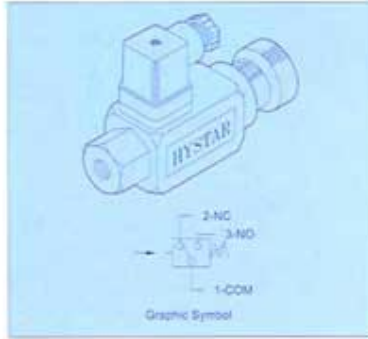


HYSTAR®

DIMENSIONS

MILLIMETERS(INCHES)

DNA Series Pressure Switches



Ordering Code

DNA - 100K - 22B

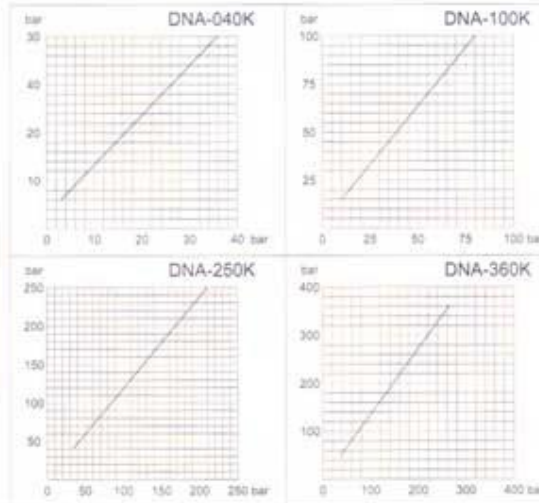
① ② ③

- ① Series
DNA-
Direct read-out,
Standard type.
- ② Pressure Adj. Range

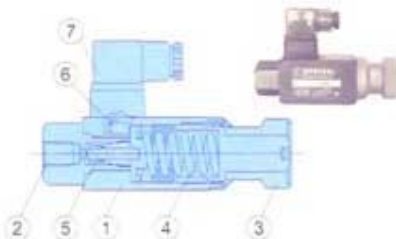
Model	Pres. Adj. Range bar	Surge Pres. bar	Weight kg
040K	6~40	150	1.0
100K	15~100	250	1.0
250K	40~250	300	1.0
360K	50~360	400	1.0

- ③ Design Number
22B: 1/4"PT(Rc)
22B80: 1/4"PF(G)
22B90: 1/4"NPT

Hysteresis Diagrammes



Schematic Cross-Section



No.	Part Name
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Spring
5	Servo-Piston
6	Micro-Switch
7	Electrical Connector

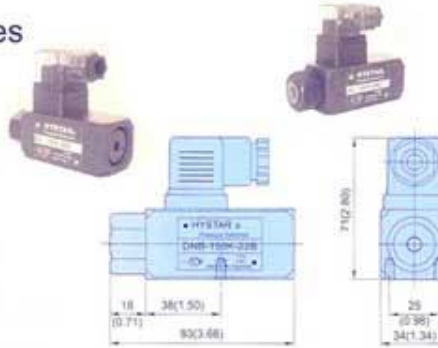
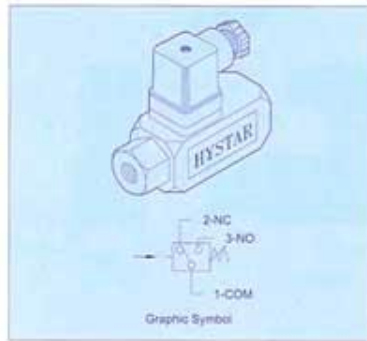


PRESSURE SWITCH

DIMENSIONS

MILLIMETERS(INCHES)

DNB Series Pressure Switches

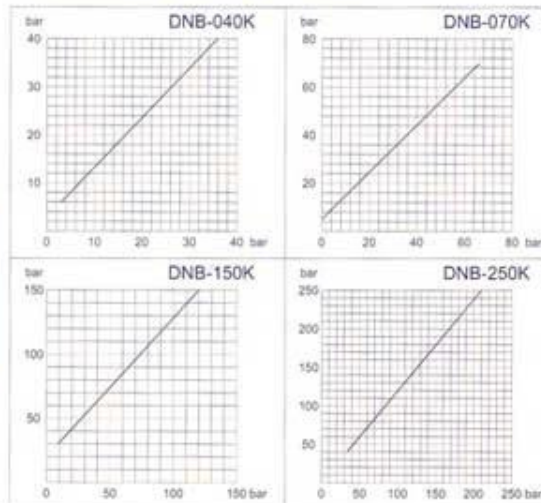


Ordering Code

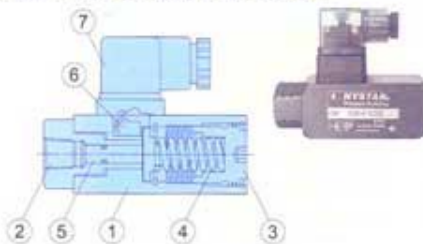
DNB - 150K - 22B

- ① Series
DNB-
General type.
- ② Pressure Adj. Range
- | Model | Pres. Adj. Range
bar | Surge Pres.
bar | Weight
kg |
|-------|-------------------------|--------------------|--------------|
| 040K | 6~ 40 | 150 | 0.6 |
| 070K | 5~ 70 | 200 | 0.6 |
| 150K | 30~150 | 300 | 0.6 |
| 250K | 40~250 | 300 | 0.6 |
- ③ Design Number
22B: 1/4"PT(Rc)
22B80: 1/4"PF(G)
22B90: 1/4"NPT

Hysteresis Diagrammes



Schematic Cross-Section



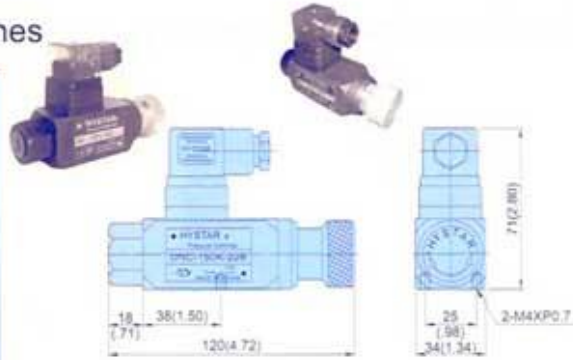
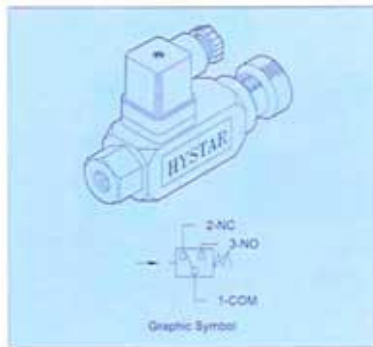
No.	Part Name
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Spring
5	Servo-Piston
6	Micro-Switch
7	Electrical Connector

HYSTAR®

DIMENSIONS

MILLIMETERS(INCHES)

DNC Series Pressure Switches

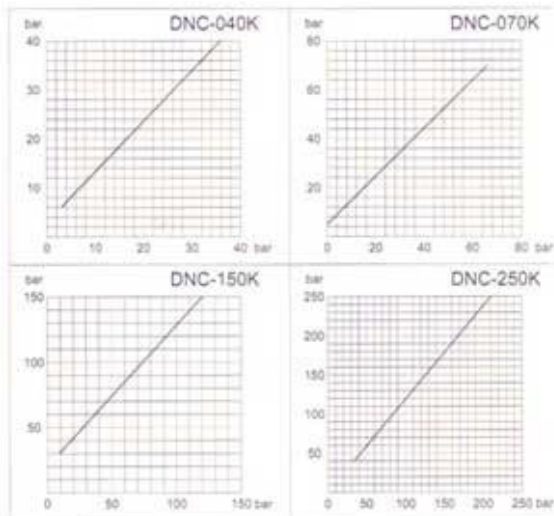


Ordering Code

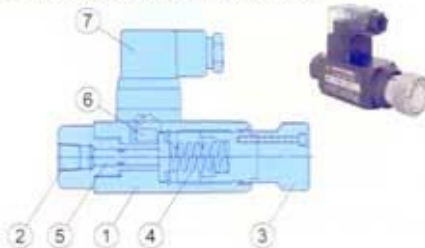
DNC - 150K - 22B

- ① ② ③
- ① Series
DNC-
General type.
- ② Pressure Adj. Range
- | Model | Press Adj. Range
bar | Surge Pres.
bar | Weight
kg |
|-------|-------------------------|--------------------|--------------|
| 040K | 6- 40 | 150 | 0.6 |
| 070K | 5- 70 | 200 | 0.6 |
| 150K | 30-150 | 300 | 0.6 |
| 250K | 40-250 | 300 | 0.6 |
- ③ Design Number
22B: 1/4"PT(Rc)
22B80: 1/4"PF(G)
22B90: 1/4"NPT

Hysteresis Diagrammes



Schematic Cross-Section



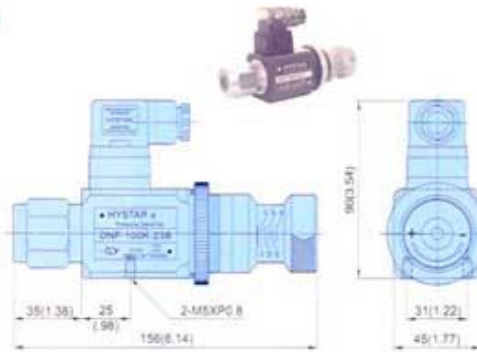
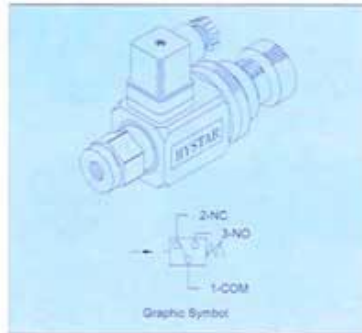
No.	Part Name
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Spring
5	Servo-Piston
6	Micro-Switch
7	Electrical Connector

HYSTAR PRESSURE SWITCH

DIMENSIONS

MILLIMETERS(INCHES)

DNF Series Pressure Switches



Ordering Code

DNF - 100K - 30B

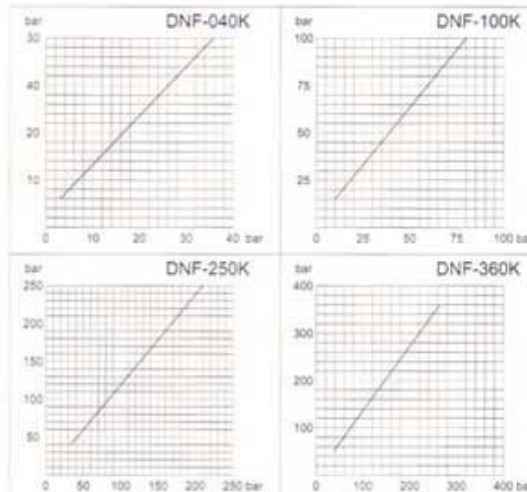
① ② ③

- ① Series
DNF-
Direct read-out,
Panel mounting type.
- ② Pressure Adj. Range

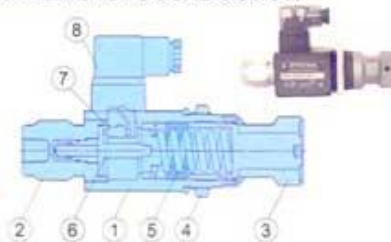
Model	Press Adj. Range bar	Surge Pres. bar	Weight kg
040K	6~ 40	200	1.2
100K	15~100	350	1.2
250K	40~250	350	1.2
360K	50~360	400	1.2

- ③ Design Number
30B: 1/4"PT(Rc)
30B80: 1/4"PF(G)
30B90: 1/4"NPT

Hysteresis Diagrammes



Schematic Cross-Section



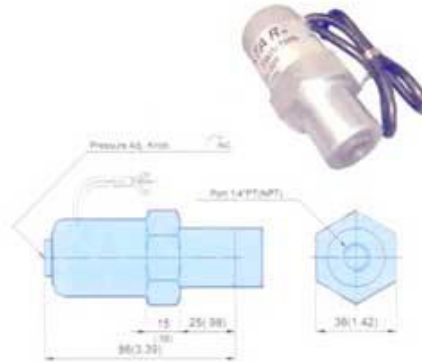
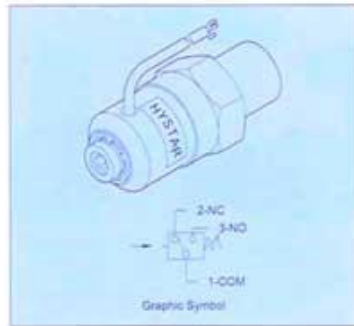
No.	Description
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Knob Set Screw
5	Spring
6	Servo-Piston
7	Micro-Switch
8	Electrical Connector

HYSTAR

DIMENSIONS

MILLIMETERS(INCHES)

DNK Series Pressure Switches



Ordering Code

DNK - 100K - 22B

- ① Series DNK- Direct read-out, Standard type.
 ② Pressure Adj. Range
 ③ Design Number

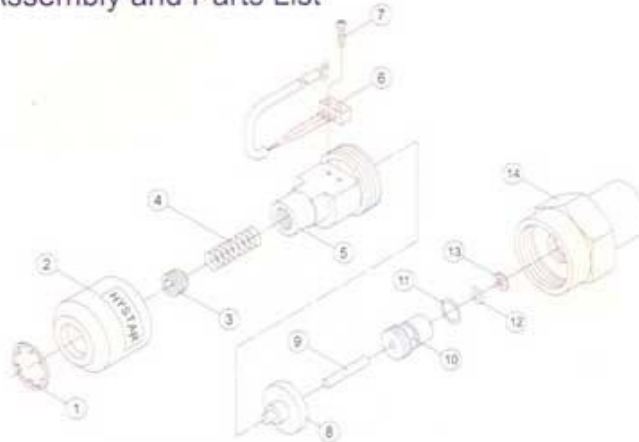


2 Pressure Adj. Range

Model	Press Adj. Range bar	Surge Pres. bar	Weight kg
050K	15~ 50	150	1.0
100K	15~100	250	1.0
150K	30~150	300	1.0
250K	40~250	400	1.0

- ③ Design Number
 22B: 1/4"PT(Rc)
 22B80: 1/4"PF(G)
 22B90: 1/4"NPT

Assembly and Parts List



No.	Part Name
1	Ring
2	Cover
3	Pressure Adj. Knob
4	Spring
5	Inside Body
6	Micro-Switch
7	Fix-Screw
8	Space
9	Servo-Piston
10	Piston Body
11	O-Ring
12	O-Ring
13	Space
14	Body

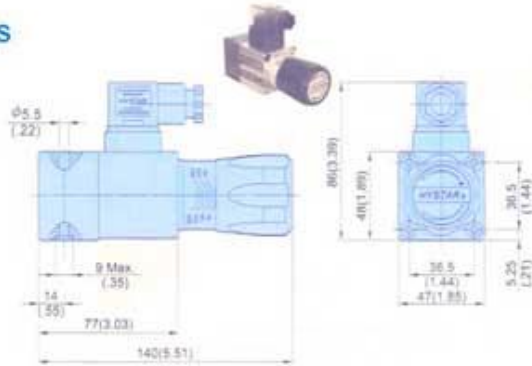
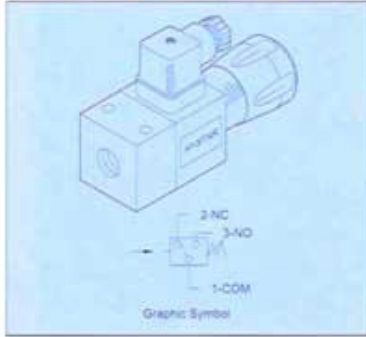


PRESSURE SWITCH

DIMENSIONS

MILLIMETERS(INCHES)

DNL Series Pressure Switches



Ordering Code

DNL - 100K - 21B

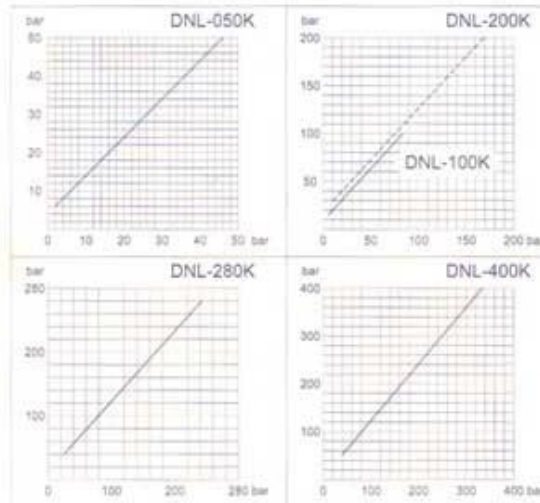
① ② ③

- Series
DNL- Direct read-out,
Heavy-duty micro-switch.
- Pressure Adj. Range

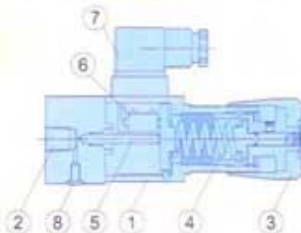
Model	Press Adj. Range bar	Surge Pres. bar	Weight kg
050K	6~ 50	200	1.0
100K	15~100	300	1.0
200K	30~200	300	1.0
280K	40~280	350	1.0
400K	50~400	450	1.0

- Design Number
21B: 1/4"PT(Rc)
21B80: 1/4"PF(G)
21B90: 1/4"NPT

Hysteresis Diagrammes



Schematic Cross-Section



No.	Part Name
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Spring
5	Servo-Piston
6	Micro-Switch
7	Electrical Connector
8	O-ring P6(M5XP0.8) Sub-Plate Mounting

HYSTAR®

DIMENSIONS

MILLIMETERS(INCHES)

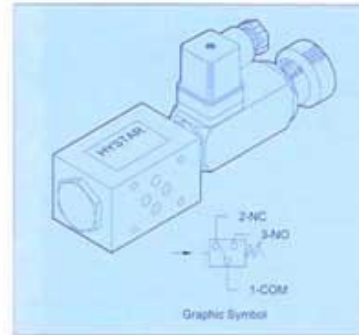
DNM Series Pressure Switches

Ordering Code

DNM - 01 P - 100K - 21B

1
 2
 3
 4
 5

- 1 Series
DNM-
Direct read-out,
Sandwich type.
- 2 For use with solenoid valves
01-ISO 03/CETOP 3/NFPA D03.
03-ISO 05/CETOP 5/NFPA D05.
- 3 Pressure transforms line



4 Pressure Adj. Range

Model	Press. Adj. Range	
	bar	Surge Pres. bar
040K	6~ 40	200
100K	15~100	350
250K	40~250	350

- 5 Design Number
21B:With DIN 912 bolts.
21B90:With UNC [North American] bolts.



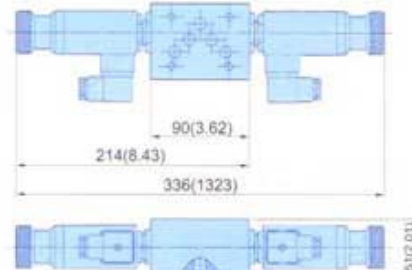
Hysteresis Diagrammes

See table DNA series.



Model	Weight
DNM-01P(A,B)	2.1 kgs
DNM-01W	3.1 kgs

For use with ISO 03/CETOP 3/NFPA D03 standard Solenoid Valves.



Model	Weight
DNM-03P(A,B)	3.1 kgs
DNM-03W	4.1 kgs

For use with ISO 05/CETOP 5/NFPA D05 standard Solenoid Valves.



PRESSURE SWITCH

DIMENSIONS

MILLIMETERS(INCHES)

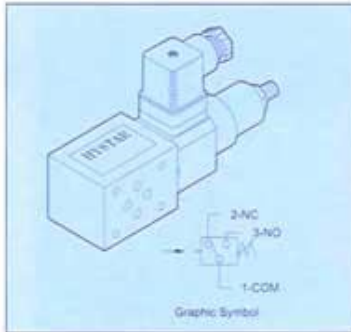
DNMB Series Pressure Switches

Ordering Code

DNMB - 01 P - 150K - 21B

① ② ③ ④ ⑤

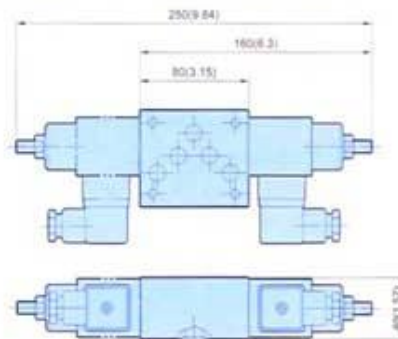
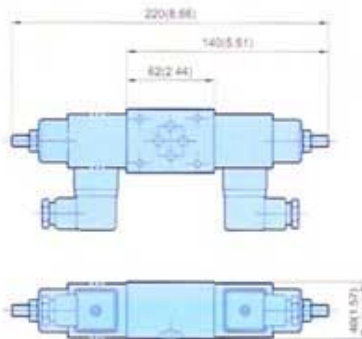
- ① Series
DNMB-Sandwich type
- ② For use with solenoid valves
01-ISO 03/CETOP 3/NFPA D03,
03-ISO 05/CETOP 5/NFPA D05.
- ③ Pressure transforms line



④ Pressure Adj. Range

Model	Pres Adj. Range bar	Surge Pres. bar
040K	6~ 40	200
070K	8~ 70	200
150K	15~150	350
250K	40~250	350

- ⑤ Design Number
21B: With DIN 912 bolts.
21B90: With UNC [North American] bolts.



Model	Weight
DNMB-01P(A,B)	0.55 kgs
DNMB-01W	0.8 kgs



For use with ISO 03/CETOP 3/NFPA D03 standard Solenoid Valves.

Model	Weight
DNMB-03P(A,B)	3.1 kgs
DNMB-03W	4.1 kgs



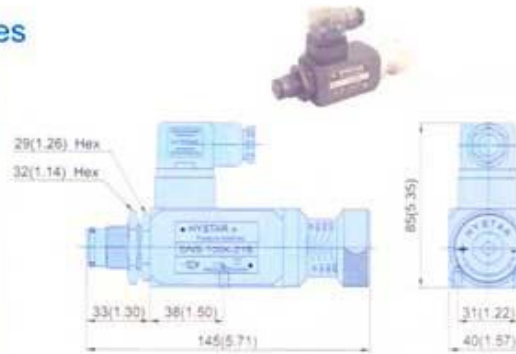
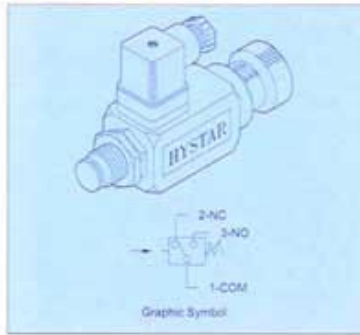
For use with ISO 05/CETOP 5/NFPA D05 standard Solenoid Valves.

HYSTAR®

DIMENSIONS

MILLIMETERS(INCHES)

DNS Series Pressure Switches



Ordering Code

DNS - 100K - 22B

- ① Series
 DNS-Direct read-out,
 Screw-in type.
- ② Pressure Adj. Range

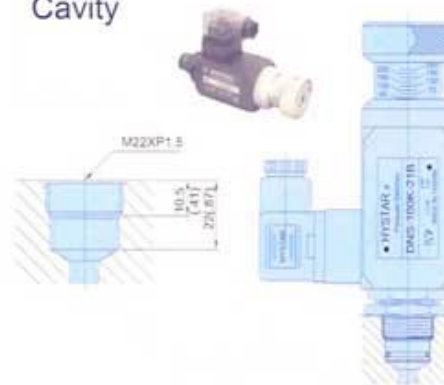
Model	Pres.Adj. Range bar	Surge Pres. bar	Weight kg
040K	6~ 40	150	1.0
100K	15~100	250	1.0
250K	40~250	300	1.0
360K	50~360	400	1.0

- ③ Design Number
 22B:

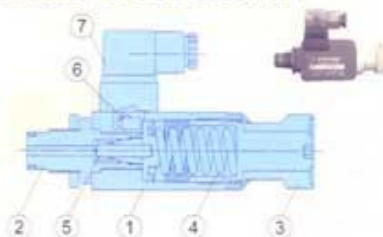
Hysteresis Diagrammes

See table DNA series.

Cavity



Schematic Cross-Section



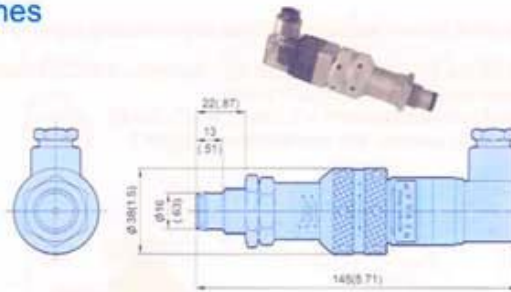
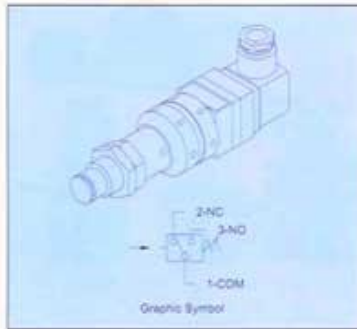
No.	Part Name
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Spring
5	Servo-Piston
6	Micro-Switch
7	Electrical Connector

PRESSURE SWITCH

DIMENSIONS

MILLIMETERS(INCHES)

DNSB Series Pressure Switches



Ordering Code

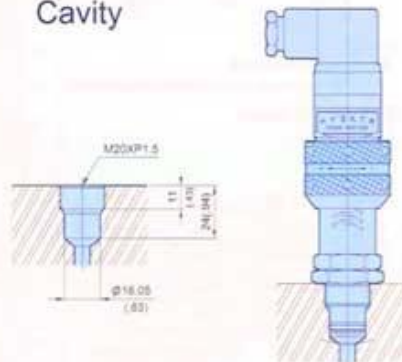
DNSB - 140K - 22B

- ① Series
DNSB-
Direct read-out,
Screw-in type.
- ② Pressure Adj. Range

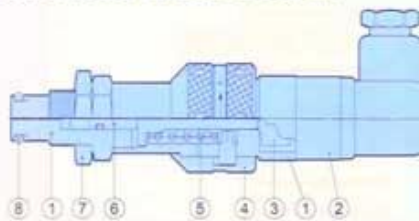
Model	Pres. Adj. Range bar	Surge Pres. bar	Weight kg
050K	6-50	100	0.5
090K	15-90	180	0.5
140K	25-140	280	0.5
210K	35-210	420	0.5

- ③ Design Number
22B

Cavity



Schematic Cross-Section



No.	Part Name
1	Body(Casting-Iron)
2	Electrical Connector
3	Micro-Switch
4	Pressure Adj. Knob
5	Spring
6	Servo-Piston
7	Nut
8	O-Ring

HYSTAR®

DIMENSIONS

MILLIMETERS(INCHES)

DNV Series Pressure Switches

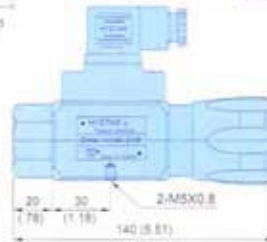
(No point, sensor pressure switches, high switching capacity)

CAUTION FOR INSTRUCTION, OPERATING CONTROLS AND CONNECTIONS

Rated operating voltage: DC12-24V
 Rated operating current: < 1.1 mA (Max 1.1 mA)
 Operating controls and connections as figure 1



Graphic Symbol

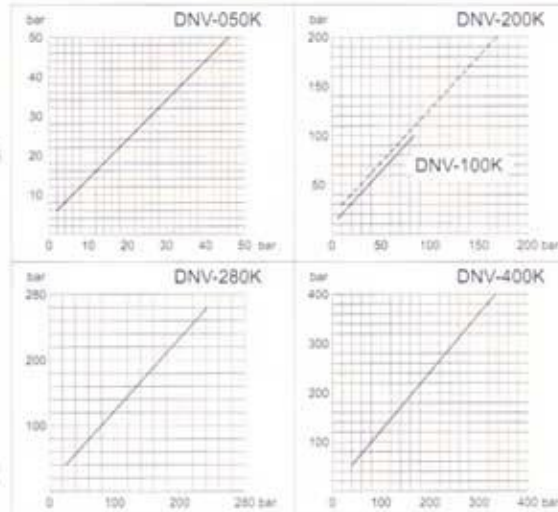


Ordering Code

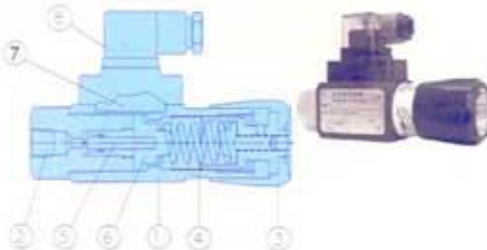
DNV - 100K - N - 21B

- | Model | Pres Adj. Range
bar | Surge Pres.
bar | Weight
kg |
|-------|------------------------|--------------------|--------------|
| 050K | 6~ 50 | 200 | 1.0 |
| 100K | 15~100 | 300 | 1.0 |
| 200K | 30~200 | 300 | 1.0 |
| 280K | 40~280 | 350 | 1.0 |
| 400K | 50~400 | 450 | 1.0 |
- ① Series
DNV-Direct read-out,
Heavy-duty sensor pressure switch.
- ② Pressure Adj. Range
- ③ Method of Output
N: NPN-(standard)
P: PNP
- ④ Design Number
21B: 1/4"PT(Rc)
21B80: 1/4"PF(G)
21B90: 1/4"NPT

Hysteresis Diagrammes



Schematic Cross-Section



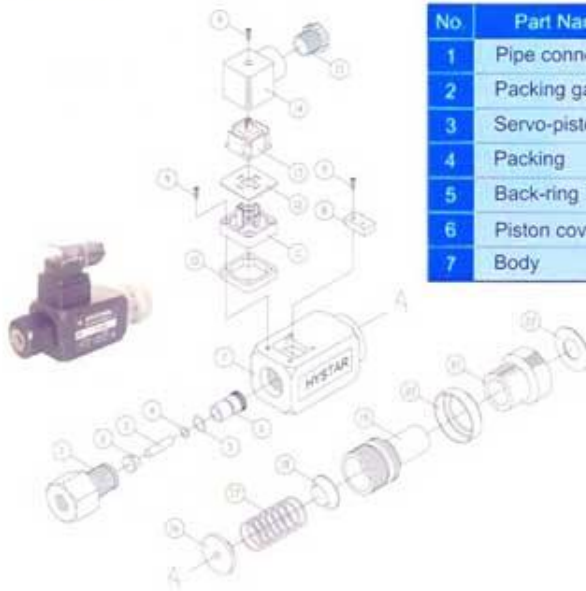
No	Part Name
1	Body(Casting-Iron)
2	Connection Port 1/4"PT(Rc)
3	Pressure Adj. Knob
4	Spring
5	Servo-Piston
6	Sensor Point
7	Sensor Switches
8	Electrical Connector



PRESSURE SWITCH

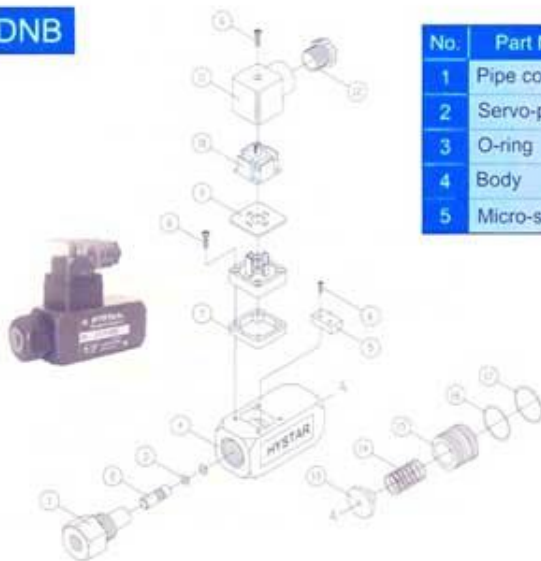
Assembly and Parts List

DNA



No.	Part Name	No.	Part Name
1	Pipe connector	8	Micro-switch
2	Packing gasket	9	Fixing screw
3	Servo-piston	10	Electric connector gasket
4	Packing	11	Electric connector base
5	Back-ring	12	Gasket
6	Piston cover	13	Terminal block
7	Body	14	Housing
		15	Gland-nut
		16	Mechanical stop
		17	Spring
		18	Spring retainer
		19	Pressure adj. screw
		20	Control knob set screw
		21	Control knob
		22	Nameplate

DNB

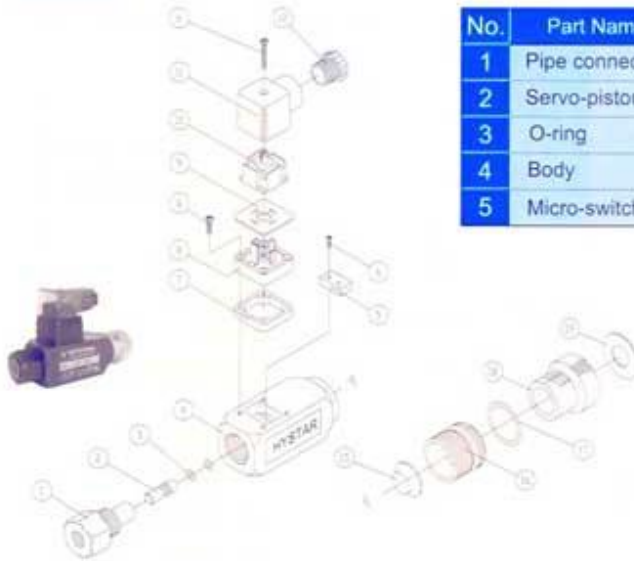


No.	Part Name	No.	Part Name
1	Pipe connector	6	Fixing screw
2	Servo-piston	7	Electric connector gasket
3	O-ring	8	Electric connector base
4	Body	9	Gasket
5	Micro-switch	10	Terminal block
		11	Housing
		12	Gland-nut
		13	Mechanical stop
		14	Spring
		15	Pressure adj. screw
		16	O-ring
		17	O-ring

HYSTAR

Assembly and Parts List

DNC



No.	Part Name	No.	Part Name
1	Pipe connector	6	Fixing screw
2	Servo-piston	7	Electric connector gasket
3	O-ring	8	Electric connector base
4	Body	9	Gasket
5	Micro-switch	10	Terminal block
		11	Housing
		12	Gland-nut
		13	Mechanical stop
		14	Spring
		15	Spring retainer
		16	Pressure adj. screw
		17	O-ring
		18	Control knob
		19	Nameplate

DNF



No.	Part Name	No.	Part Name
1	Pipe connector	11	Body
2	Packing gasket	12	Electric connector gasket
3	Servo-piston	13	Electric connector base
4	Packing	14	Gasket
5	Back-ring	15	Terminal block
6	Piston cover	16	Housing
7	Pressure actuator	17	Gland-nut
8	Micro-switch seat	18	O-ring
9	Micro-switch	19	Screw-nut
10	Fixing screw	20	Mechanical stop
		21	Spring
		22	Spring retainer
		23	Pressure adj. screw
		24	Control knob set screw
		25	Control knob
		26	Nameplate