

Valve

Catalog 2021

Solenoid Operated Directional Valve

HWE Series

Features and Handling

- WE Series is a direct solenoid operated directional spool valve. The valve porting pattern follows DIN 24 340 form A. The Valves come with wet pin DC or AC solenoids with removable coil which can be rotated through 90 degree.
- The standard valves come with DIN 43650 electrical connector with light and manual override to permit the spool to be moved without the solenoid being energized.
- For correct operation, ensure that the solenoid pressure chamber is filled with oil. Do not exceed permissible voltage range of the coil.
- Keep surge pressure below the maximum permissible back pressure port T. Keep hydraulic oil clean at ISO cleanliness code 19/16



Specification

Model	Maximum Flow L/min (USgpm)	Maximum Pressure bar (psi)	Weight kg (lb)
4HWE 6	60 (15.8)	300 (4350)	Single coil 1.6 (3.52) Double coil 2.4 (5.28)
4HWE10	100 (26.4)		Single coil 4.5 (9.9) Double coil 6.2 (13.64)

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change at any time without notice.

Solenoid Operated Directional Valve

HWE Series

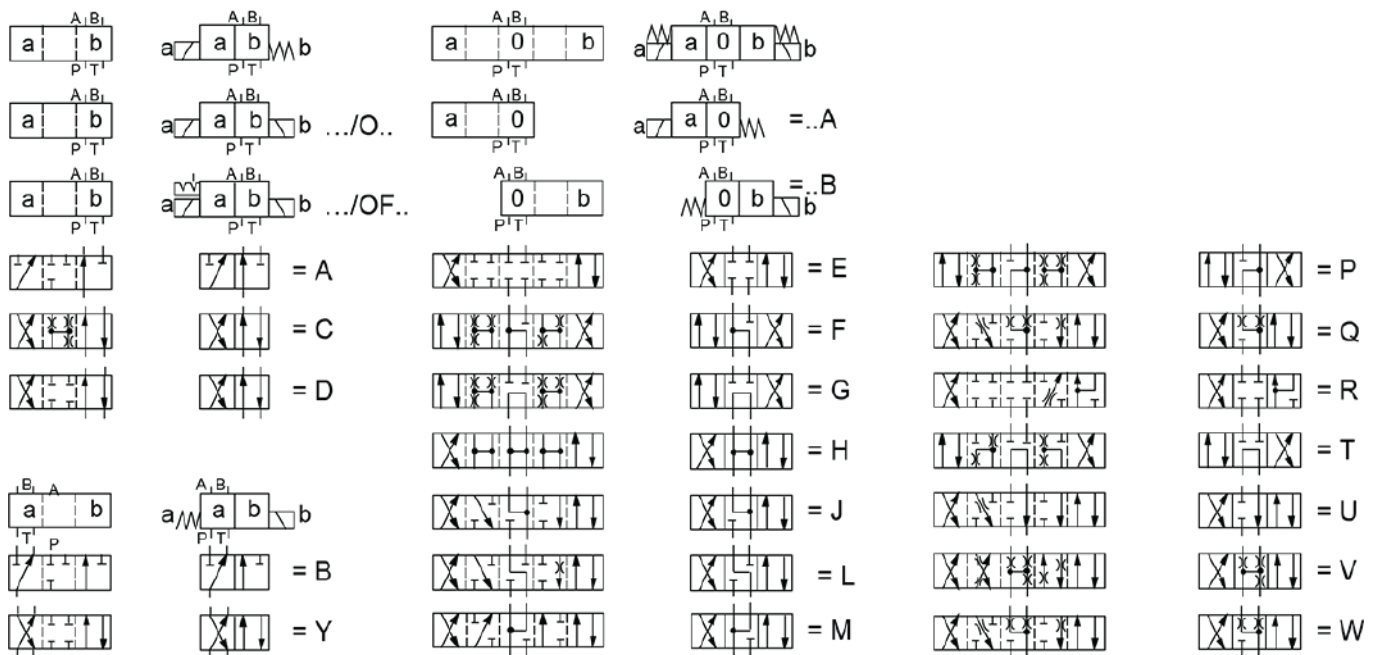
Symbols

Notes

1. With ../O and ../OF, spool A, C, and D can come without spring return with or without detent.
2. With ordering a spool with only two position "0" & "a" or "0" & "b", specify the desired position a or b after the spool code.

Example : Spool E with spool position "a"

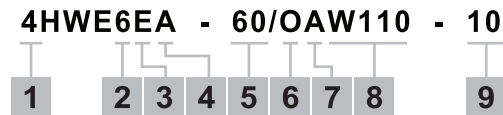
Ordering code : 4HWE6EA-60/0AW110-10



Solenoid Operated Directional Valve

HWE Series

Ordering Code



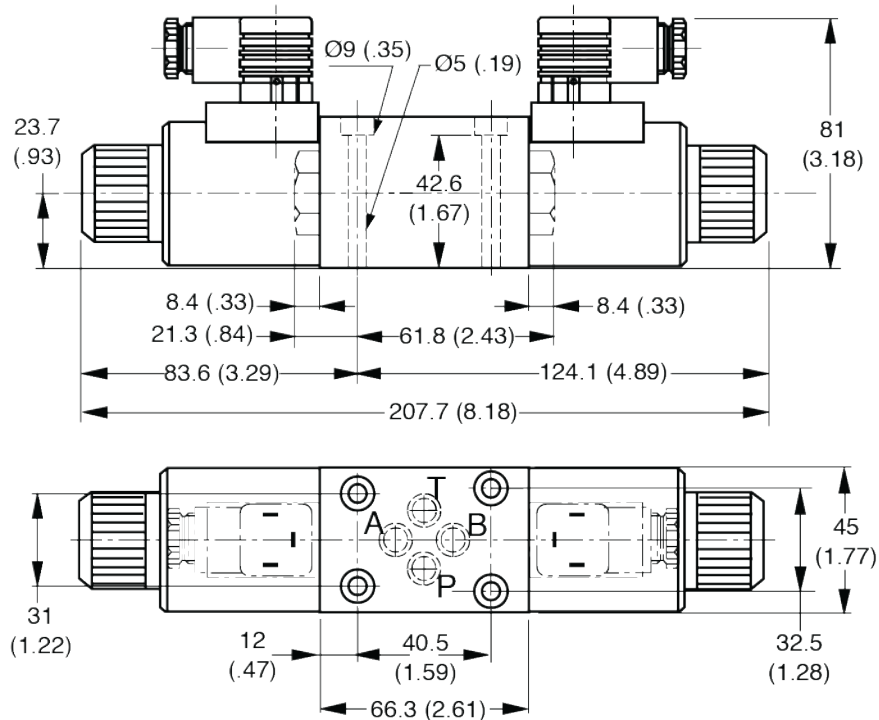
1. Number of port
4 - 4 ports
2. Valve Size
6 - NG6 (CETOP3)
10 - NG10 (CETOP5)
3. Spool type (see the table below)
4. Three position spool with
solenoid A only = A
solenoid B only = B
5. Design
60 - for HWE6
30 - for HWE10
6. Spring and Detent
S - Spring return
O - Without Spring return
7. Coil type
A - Wet pin oil immersed with removable coil
8. Coil Voltage
G12 - 12V DC
G24 - 24V DC
W220 - 220V AC 50/60 Hz
W110 - 110V AC 50/60 Hz
9. Further detail for future use

Solenoid Operated Directional Valve

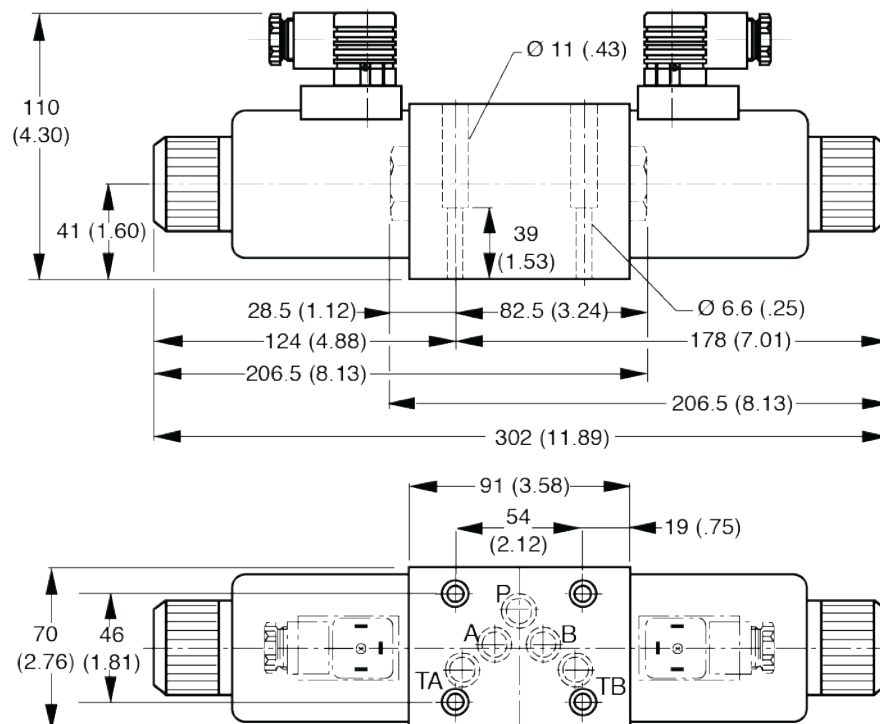
HWE Series

Installation Dimension mm (inch)

4HWE 6



4HWE 10



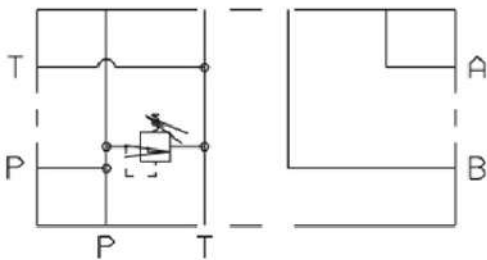
Single Station Subplate HM Series

Features and Handling

- Solenoid Valve / Cetop 3 interface
- Max Relief Pressure 240 bar
- Side / Rear Entry
- 3/8" BSP Ports



Symbols



Ordering Code

HM	-	G01	-	01	-	A
1		2		3		4

1. Model : HM - Single Station Subplate

2. Valve size
G01 - NG06 (CETOP3)

3. Service Valve
01 - With relief valve
02 - Without relief valve

4. Pressure Range
A - 7-70 bar (100-1000 psi)
B - 35-140 bar (500-2000 psi)
C - 70-240 bar (1000-3500 psi)

Pressure Switch

P-02 Series

Features and Handling

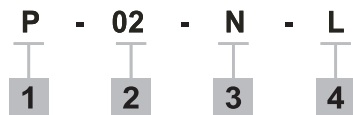
- P-02 is a spring loaded piston type pressure switch. The pressure of hydraulic oil acts on the piston in the pressure switch. The piston acts against the infinitely adjustable force of the spring which transfers the movement of the piston to the switch to open or close the electrical contact.
- Knob Set Screw is available for panel mounting.
- For installation, the pressure switch should be mounted in such a way as to prevent them being subject to vibration.



Specification

Model	Valve Size	Pressure Range bar (psi)	Electrical Rating	Usage
P-02 (L)	1/4"	1-70 (14 - 1000)	DC 24V AC 110-250V/3A	Hydraulic Oil
P-02 (H)		1-400 (140 - 5800)		

Ordering Code

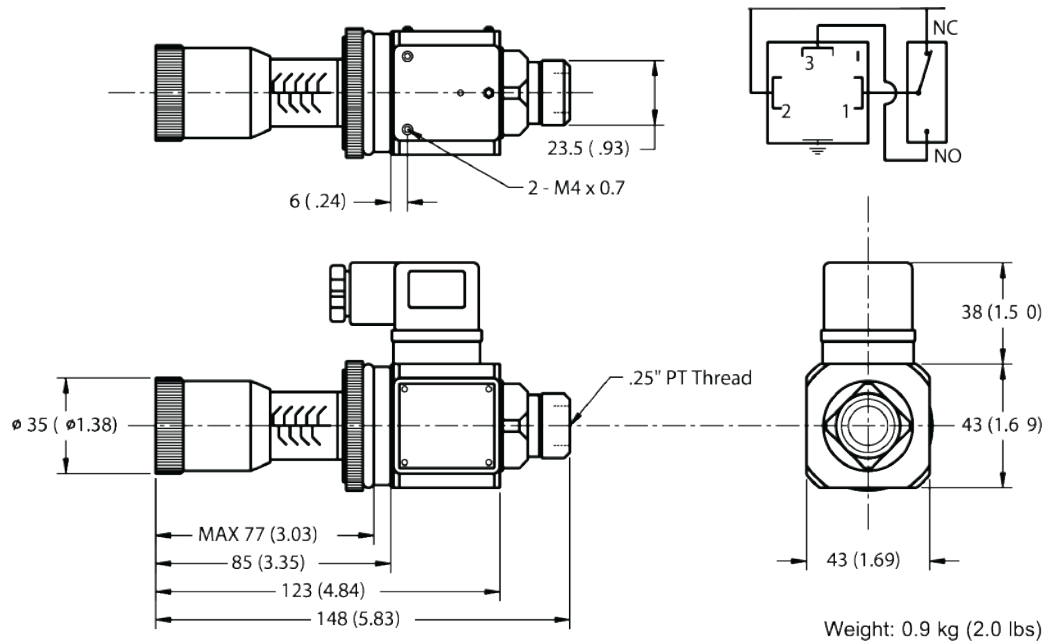


1. Model : P-02
2. Valve size
02 - 1/4"
3. Port Connection (Threaded connection only)
P - 1/4" BSPT
N - 1/4" NPT
4. Pressure Range
H - 10-400 bar (140-5800 psi)
L - 1-70 bar (14-1000 psi)

Pressure Switch

P-02 Series

Installation Dimension mm (inch)



Pilot Operated Relief Valve

RB Series

Features and Handling

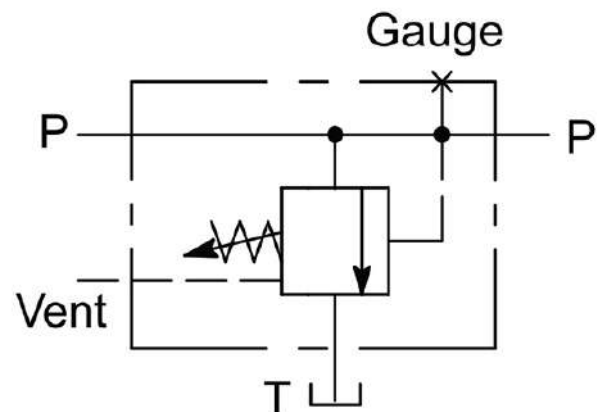
- RB series are Balanced Piston type relief valves with three pressure ranges available. The valves come with optional Vent port and Gauge port. The valves can be controlled by Solenoid Operated Directional Control valve with optional cover setting for mounting the Solenoid Operated Directional Control valve on top.
- To adjust the set pressure, loosen the lock nut of the valve and turn the handle to adjust the pressure. Maintain the back pressure at the tank port as low as possible, less than 2 bar (28 psi).



Specification

Model	Maximum Flow L/min (USgpm)	Maximum Pressure bar (psi)	Weight kg (lb)
RB-G03	30 (8)	240 (3500)	4.30 (9.5)
RBE-G03			4.40 (9.7)
RB-T04	80 (21)		2.40 (5.3)
RB-T06	175 (46)		4.30 (9.5)
RB-G06			7.20 (15.8)
RBE-T06			4.40 (9.7)
RBE-G06			7.20 (15.8)
RB-T10	454 (120)		6.70 (14.7)
RBE-T10			8.40 (18.50)

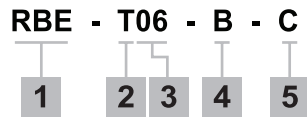
Symbols



Pilot Operated Relief Valve

RB Series

Ordering Code



1. Model Series

- RB - Standard Cover
- RBE - Cover for mounting CETOP 3 or NG6 Solenoid Valve (size 06 and size 10 only)

2. Mounting

- T - Threaded connections
- G - Gasket mounting (size 03 and size 06 only)

3. Valve Size

- 03 - 3/8"
- 04 - 1/2"
- 06 - 3/4"
- 10 - 1-1/4"

4. Threaded Size (Threaded connections only)

RB-T04

Code	Thread size
P	1/2" BSPT
B	1/2" BSP

RB-T06 or RBE-T06

Code	Thread size
N	3/4" NPT
B	3/4" BSP
S	SAE #12

RB-T10 or RBE-T10

Code	Thread size
N	1-1/4" NPT
B	1-1/4" BSP
S	SAE #20

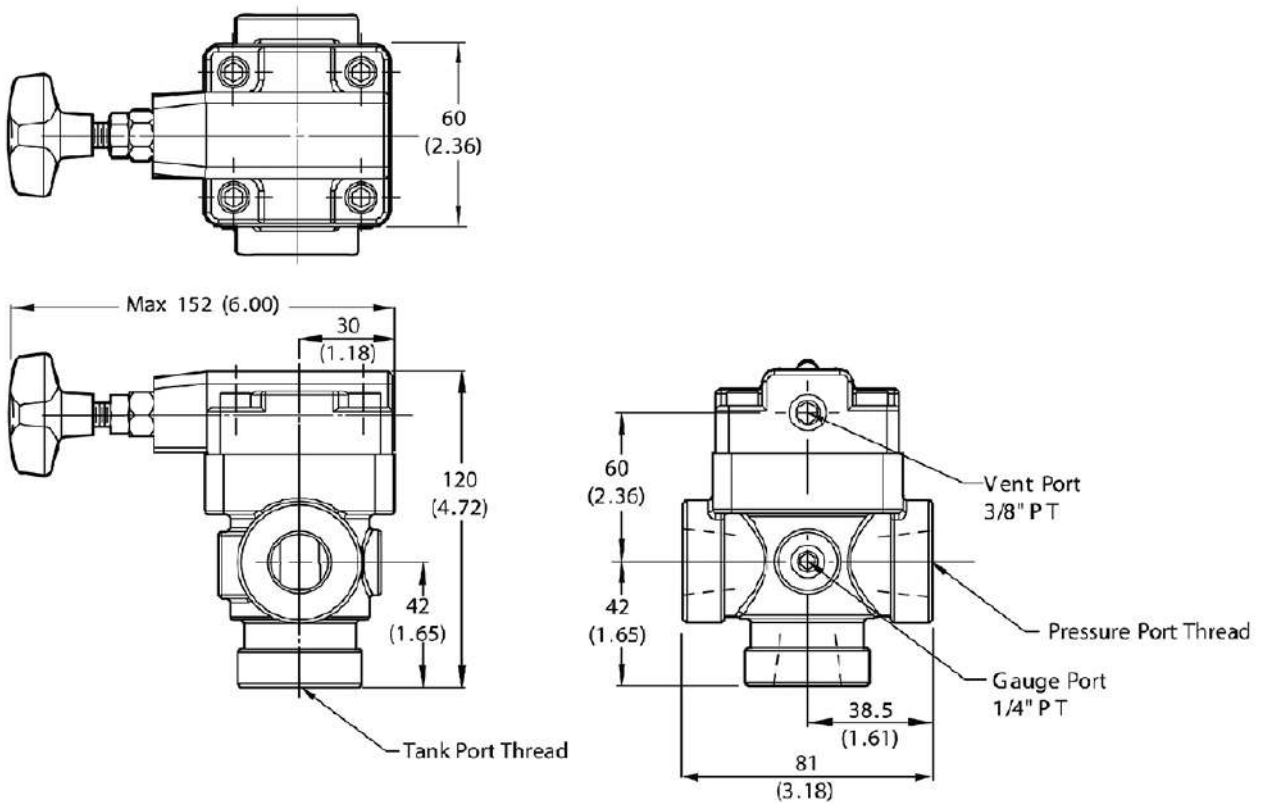
5. Pressure Range

- A - 7-70 bar (100-1000 psi)
- B - 35-140 bar (500-2000 psi)
- C - 70-240 bar (1000-3500 psi)

Pilot Operated Relief Valve RB Series

Installation Dimension mm (inch)

RB-T04

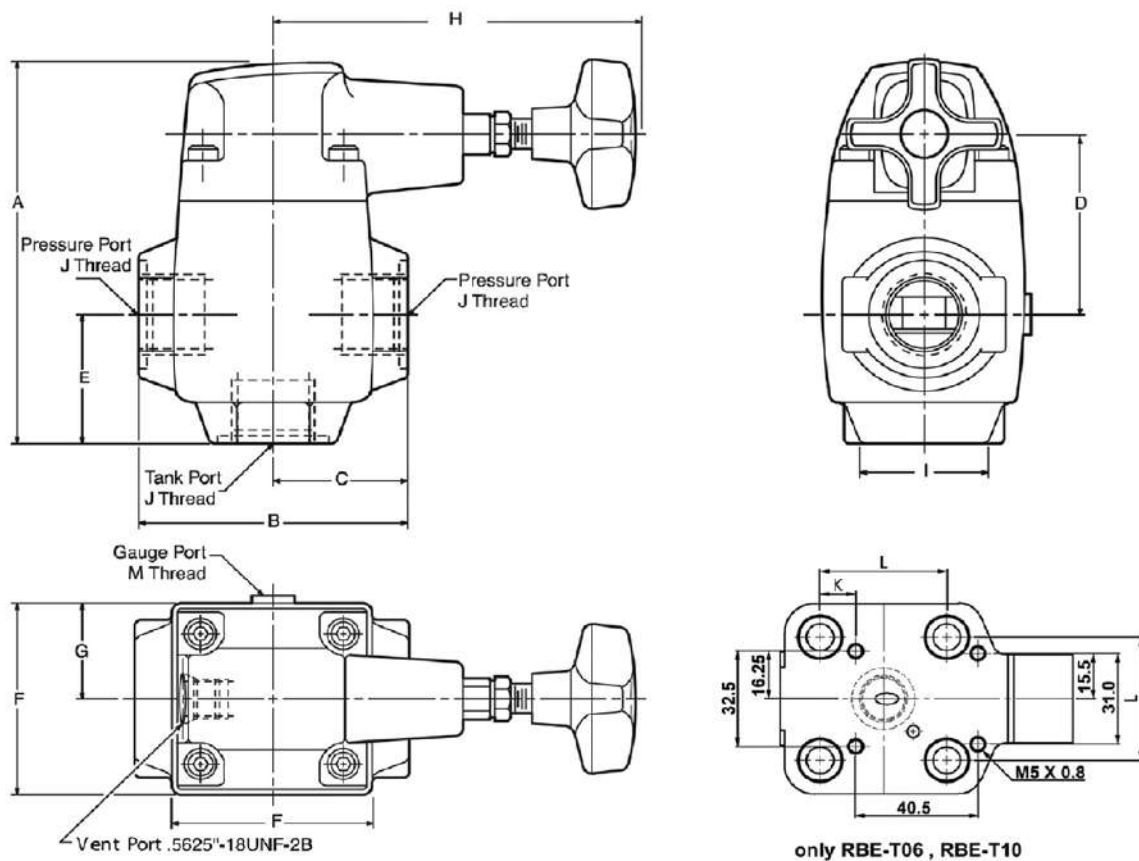


Pilot Operated Relief Valve

RB Series

Installation Dimension mm (inch)

RB-T06, RBE-T06, RB-T10, RBE-T10



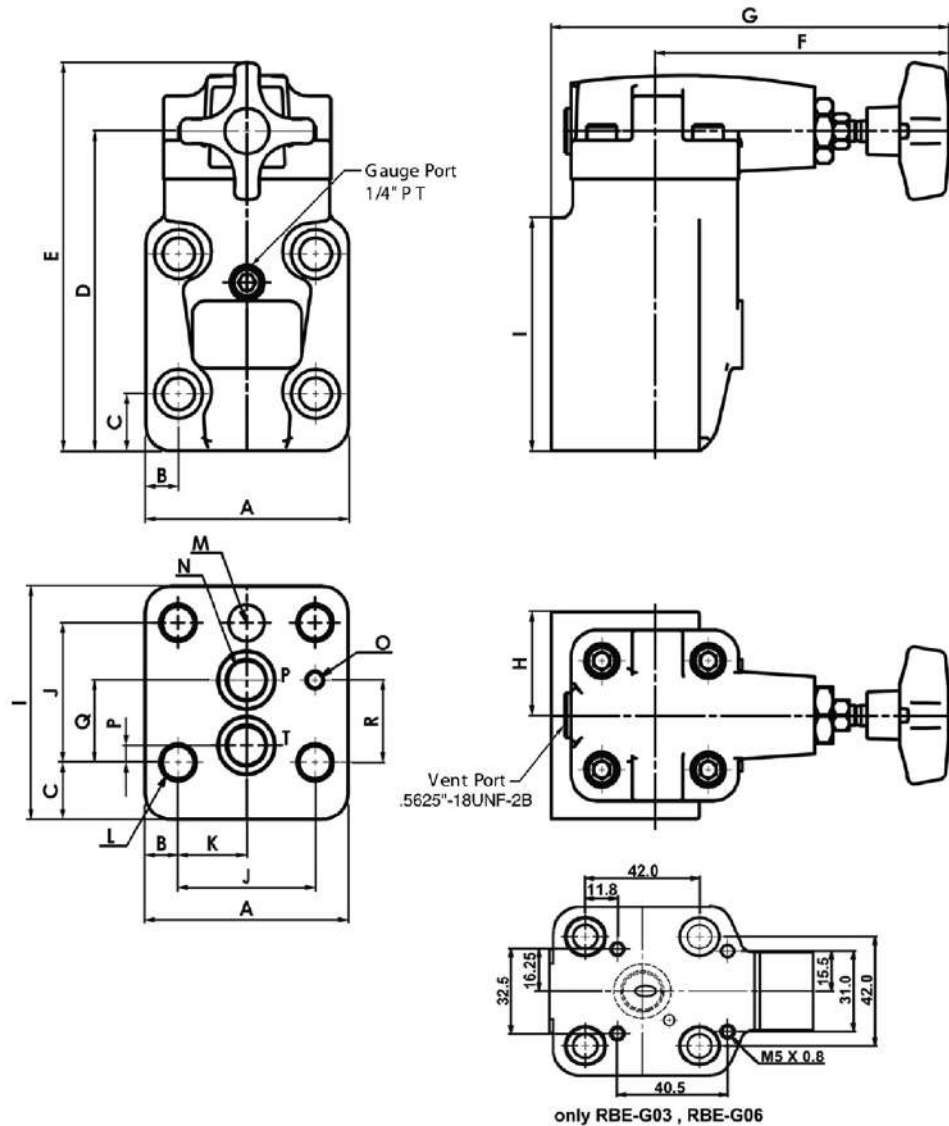
Model	Dimension mm (inch)												
	A	B	C	D	E	F	G	H	I	J	K	L	M
RB-T06 RBE-T06	128.8	92.5	46.3	63.0	45.5	73.0	36.5	134.0	57.0	3/4" NPT 3/4" BSP 1.0625" - 12UN-2B	11.8	42.0	1/4"PT
RB-T010 RBE-T010	157.2	124.0	61.9	66.5	61.9	83.3	41.7	134.0	61.9	1-1/4" NPT 1-1/4" BSP 1.0625" - 12UN-2B	6.75	54.0	.4375"-20UNF-2B

Pilot Operated Relief Valve

RB Series

Installation Dimension mm (inch)

RB-G03, RBE-G03, RB-G06, RBE-G06



Model	Dimension mm (inch)																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
RB-G03 RBE-G03	80.0	13.0	23.0	123.5	150.0	134.0	175.0	40.0	90.0	54.0	27.0	Ø 12.5	Ø 1.8	Ø 16.0	Ø 6.0	6.6	31.8	31.8
RB-G06 RBE-G06	103.0	16.5	17.6	148.5	175.0	134.0	175.0	51.5	113.5	66.7	33.35	Ø 17.0	Ø 3.0	Ø 24.0	Ø 6.3	11.2	49.2	23.9

Remote Control Relief Valve

RM Series

Features and Handling

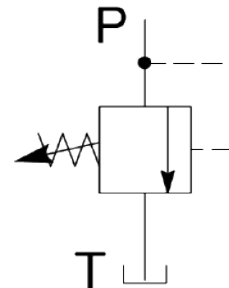
- RM series are Direct type relief valves with three pressure ranges available. They can be used as remote control relief valve when they are connected to the vent port of any balanced piston type relief valves.
- To adjust the set pressure, loosen the lock nut of the valve and turn the handle to adjust the pressure. Maintain the back pressure at the tank port as low as possible, less than 2 bar (28 psi).



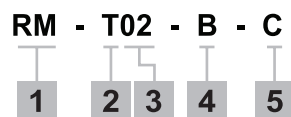
Specification

Model	Maximum Flow L/min (USgpm)	Maximum Pressure bar (psi)	Weight kg (lb)
RM-T02	12 (3.2)	240 (3500)	1.5 (3.3)
RM-G02	2 (0.5)		1.4 (3.1)

Symbols



Ordering Code



1. Model : RM

2. Mounting

- T - Threaded connections
G - Gasket mounting

3. Valve Size

02 - 1/4"

4. Threaded Size (Threaded connections only)

Code	Thread size
N	1/4" NPT
B	1/4" BSP

5. Pressure Range

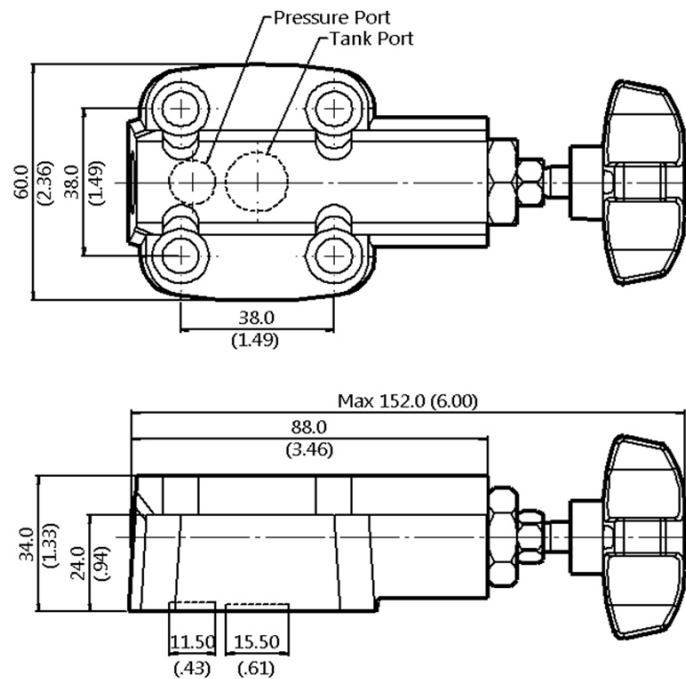
- A - 7-70 bar (100-1000 psi)
B - 35-140 bar (500-2000 psi)
C - 70-240 bar (1000-3500 psi)

Remote Control Relief Valve

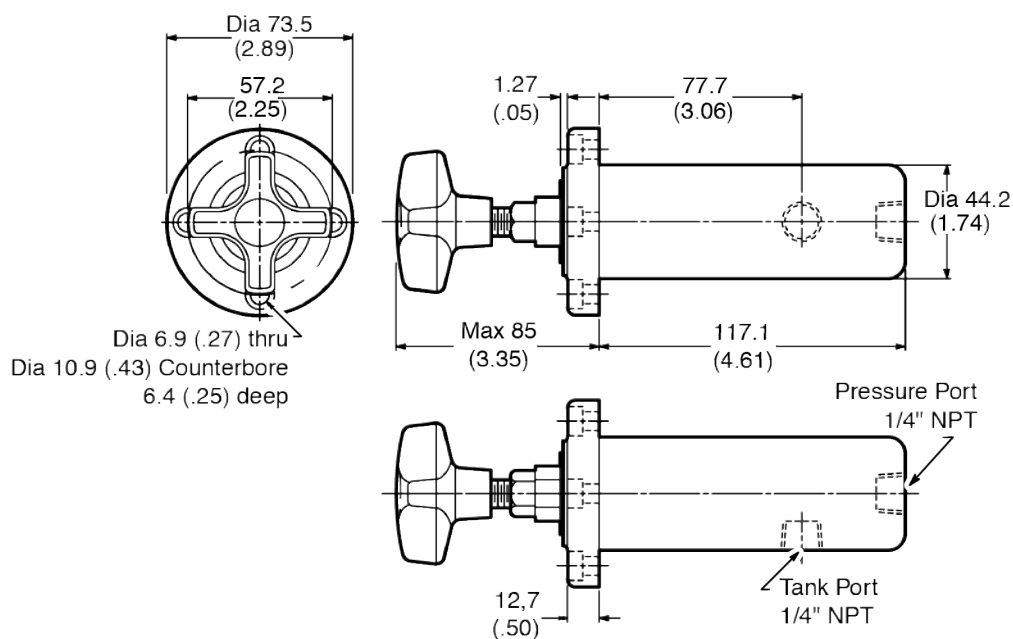
RM Series

Installation Dimension mm (inch)

RM-G02



RM-T02



Flow Control Valve

CF Series

Features and Handling

• CF Series are flow control valves with check valve. The valves control the flow in one direction and allow free flow in the other direction. With two step control range, the first three turns of the knob can control fine adjustment of low flow and the next three turns can open the valve of full flow. The knob comes with numeric indicator.



Specification

Model	Maximum Flow L/min (USgpm)	Maximum Pressure bar (psi)	Weight kg (lb)
CF-T02	19 (5)	350 (5070)	0.30 (0.66)
CF-T03	30 (8)		0.40 (0.88)
CF-T04	57(15)		0.70 (1.54)
CF-T06	95 (25)		1.00 (2.20)

Ordering Code

CF - T04

1 2 3

1. Model : CF

2. Mounting

T - Threaded connections

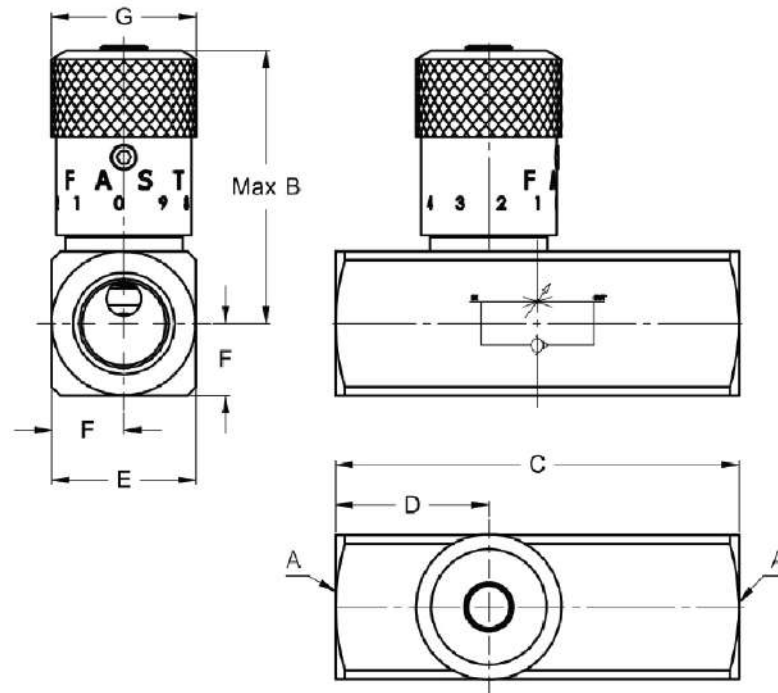
3. Valve size

02 - 1/4"
03 - 3/8"
04 - 1/2"
06 - 3/4"

Flow Control Valve

CF Series

Installation Dimensions mm (inch)



Model	Dimension mm (inch)						
	A Thread	B	C	D	E	F	G
CF-T02	1/4"NPT	40.4 (1.59)	66.5 (2.62)	26.6 (1.05)	25.4 (1.00)	12.7 (0.50)	20.6 (0.81)
CF-T03	3/8"NPT	55.4 (2.18)	70.0 (2.75)	26.6 (1.05)	25.4 (1.00)	12.7 (0.50)	25.2 (0.99)
CF-T04	1/2"NPT	68.6 (2.70)	87.0 (3.42)	33.0 (1.30)	31.7 (1.25)	15.9 (0.63)	29.8 (1.17)
CF-T06	3/4"NPT	85.9 (3.38)	98.5 (3.88)	37.5 (1.48)	38.1 (1.50)	19.05 (0.75)	34.9 (1.37)

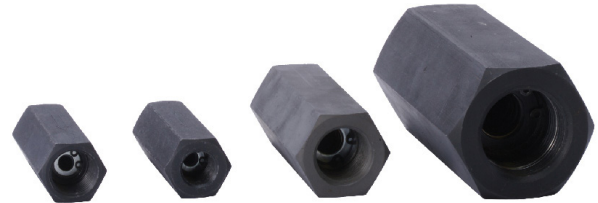
*CF-T08 and CF-T10 are available upon request.

Check Valve

CNT Series

Features and Handling

• CNT Series are check valve with optional cracking pressure. The valves allow free flow in one direction and shut-off in the other direction. The valve comes with flow rate ranges from 30L/min to 500 L/min and port size from 3/8" to 2".



Specification

Model	Maximum Flow L/min (USgpm)	Maximum Pressure bar (psi)	Weight kg (lb)
CNT-T03	30 (7.9)	315 (4600)	0.15 (0.33)
CNT-T04	50 (13.2)		0.29 (0.63)
CNT-T06	140 (36.9)		0.48 (1.05)
CNT-T08	220 (58.1)		0.90 (1.98)
CNT-T10	320 (84.5)		2.00 (4.40)
CNT-T12	430 (113.59)		2.50 (5.50)
CNT-T16	500 (132.08)		3.00 (6.61)

Ordering Code

CNT - T03 - A

1 2 3 4

1. Model : CNT

2. Mounting

T - Threaded connections

3. Valve size

03 - 3/8"
04 - 1/2"
06 - 3/4"
08 - 1"
10 - 1-1/4"
12 - 1-1/2"
16 - 2"

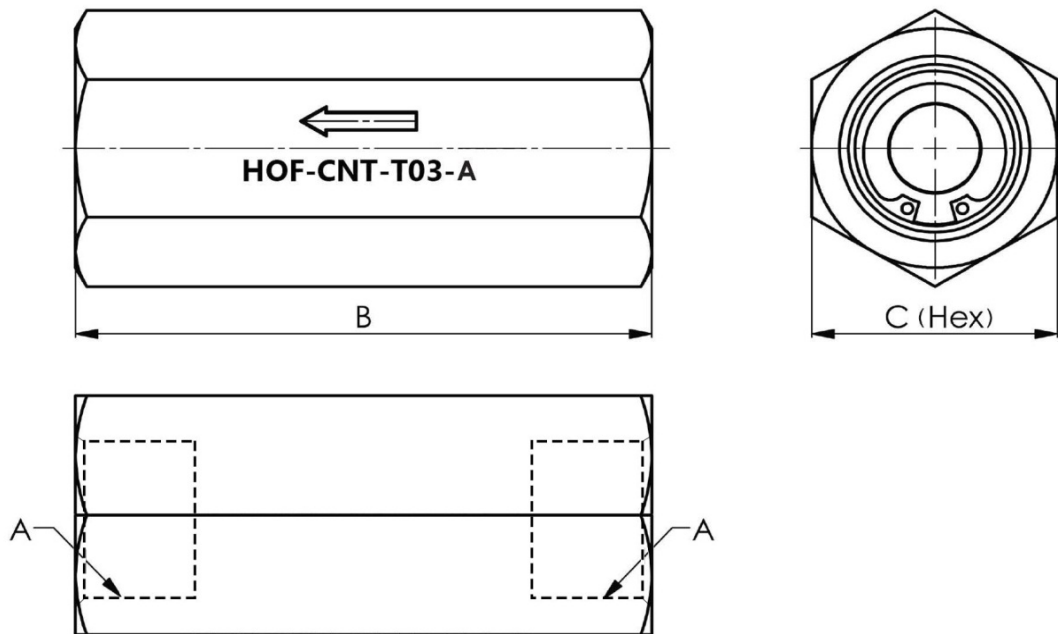
4. Cracking Pressure

A - 0.5 bar (7 psi)
B - 4.0 bar (58 psi)

Check Valve

CNT Series

Installation Dimensions mm (inch)



Model	Dimension mm (inch)		
	A Thread	B	C
CNT-T03	3/8"BSP	58.0 (2.28)	24.0 (0.94)
CNT-T04	1/2"BSP	72.0 (2.83)	30.0 (1.18)
CNT-T06	3/4"BSP	85.0 (3.34)	36.0 (1.41)
CNT-T08	1"BSP	98.0 (3.85)	46.0 (1.81)
CNT-T10	1-1/4"BSP	120.0 (4.72)	60.0 (2.36)
CNT-T12	1-1/2"BSP	138.0 (5.43)	65.0 (2.55)
CNT-T16	2" BSP	155.0 (6.10)	75.0 (2.95)

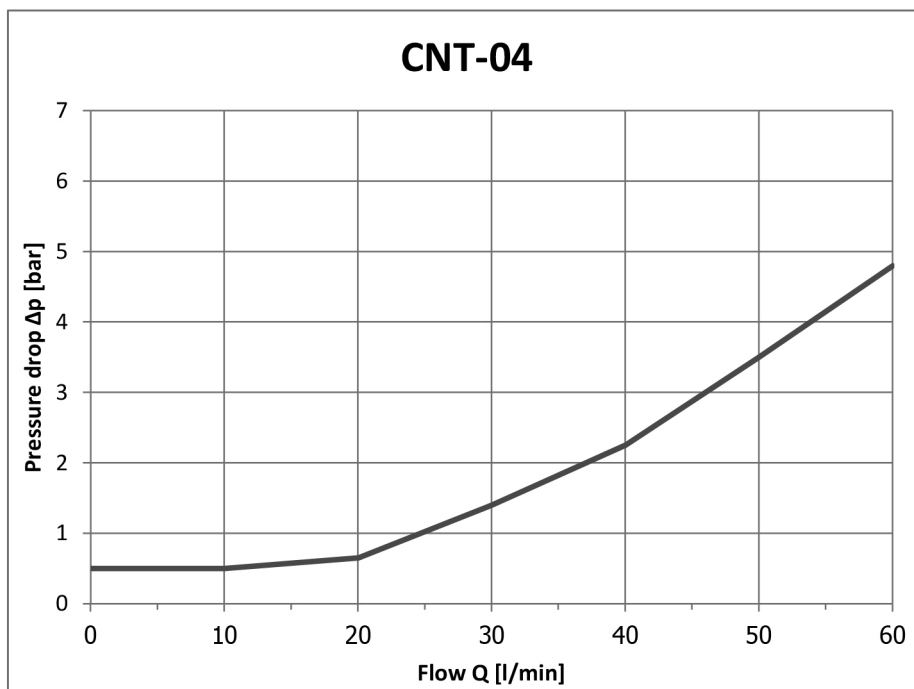
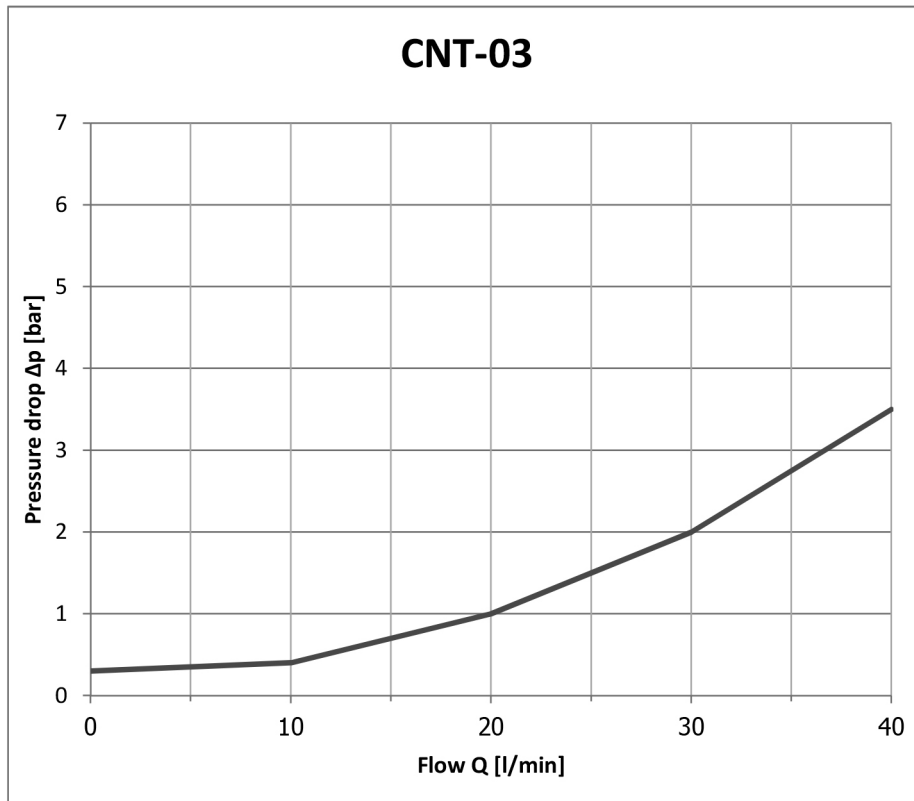
Check Valve

CNT Series

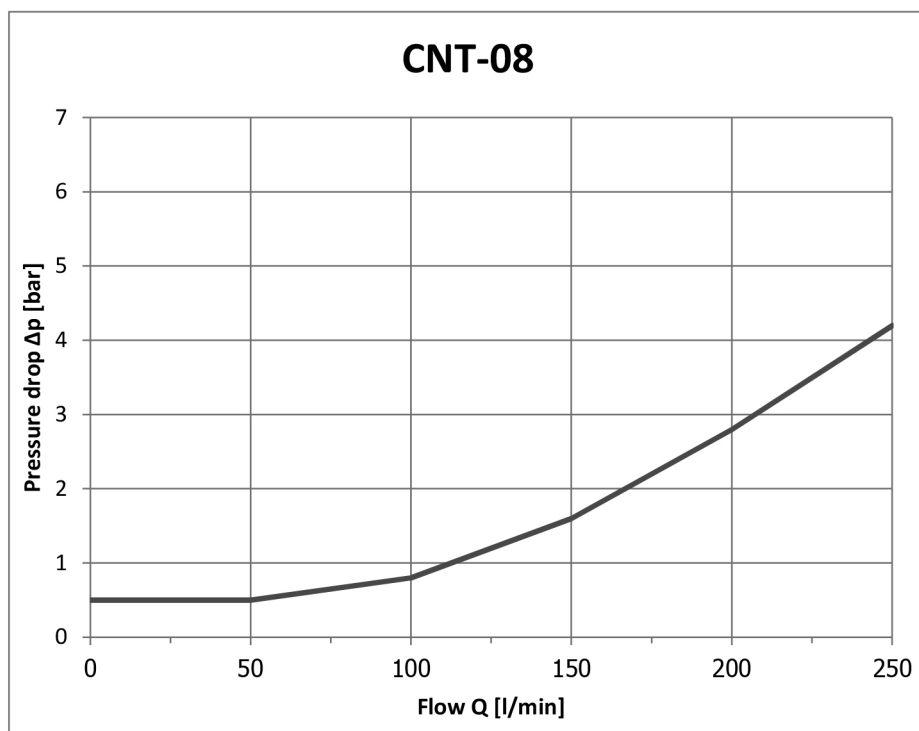
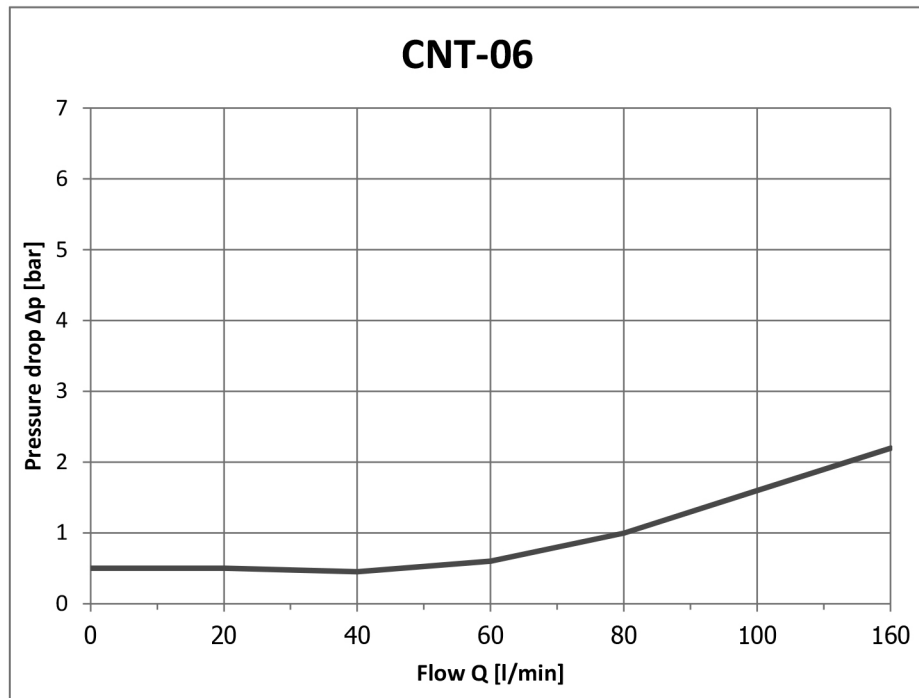
Performance Characteristics

Pressure Drop

Characteristics measured at $\nu = 32 \text{ cSt (156 SUS)}$

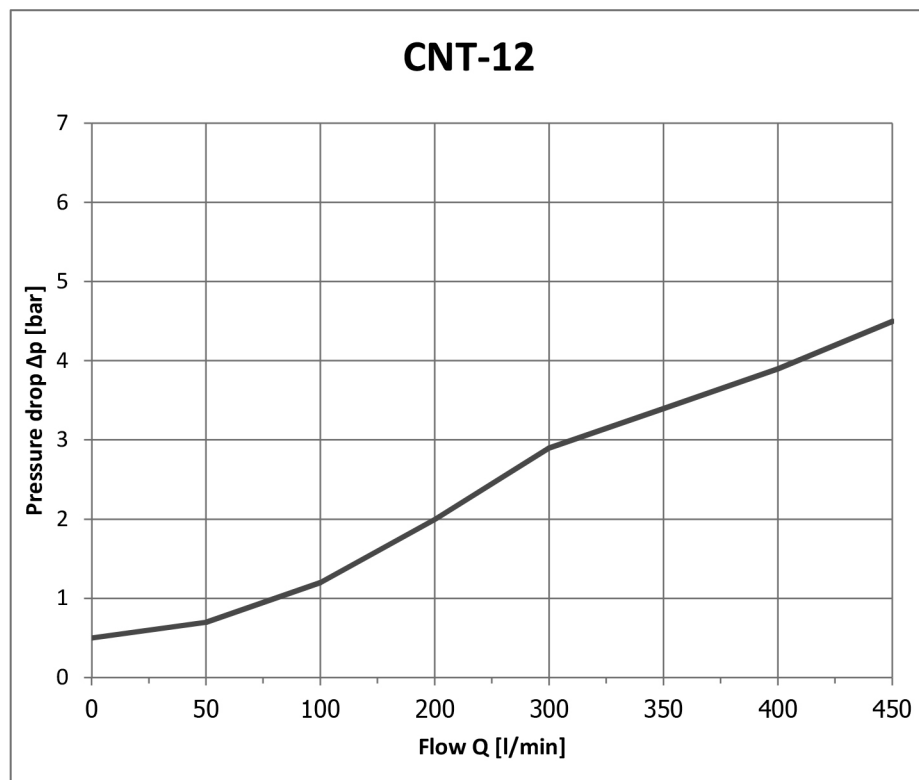
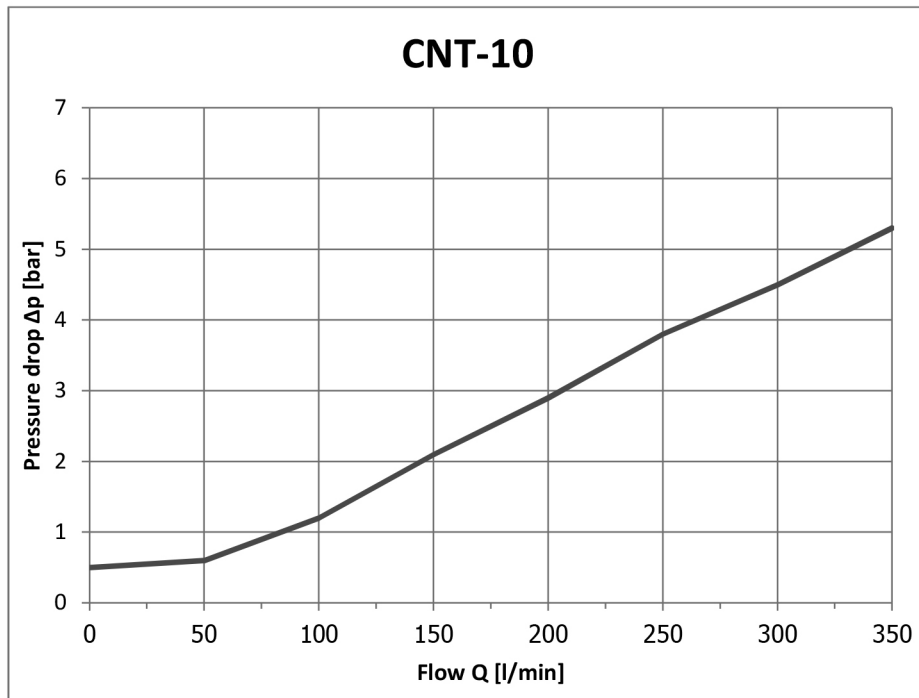


Check Valve CNT Series



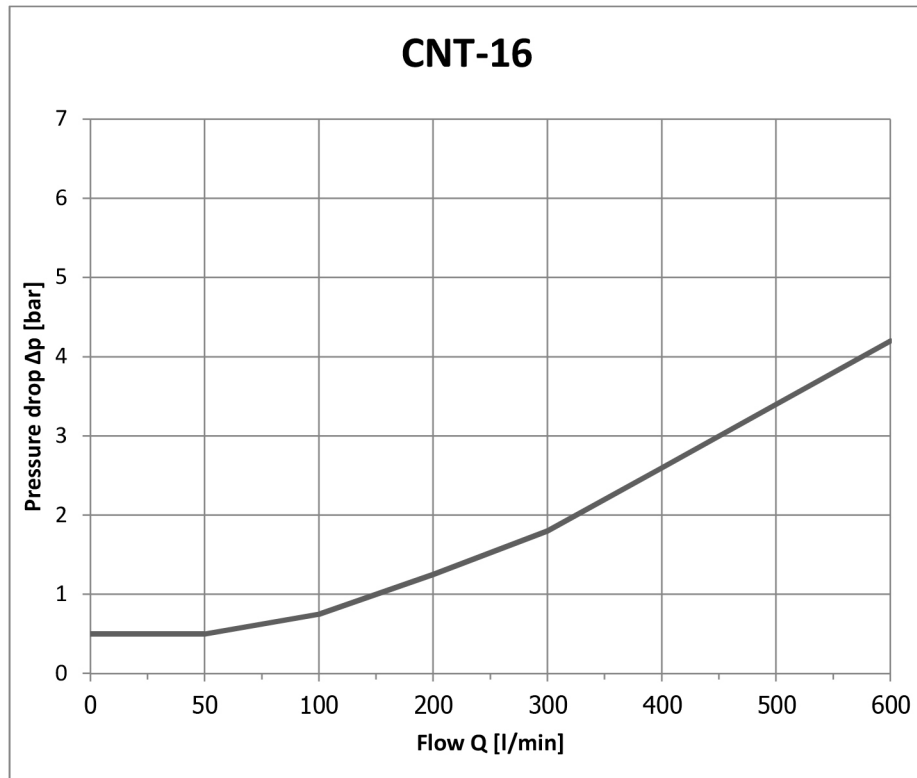
Check Valve

CNT Series



Check Valve

CNT Series



HOF Hydraulic represented by

Flowlution Co.,Ltd.

26/48 Moo4 Suksavadh Road, Jomthong, 10150 Bangkok, Thailand
Tel: +662 877 3223 Fax: +662 877 3373 info@flowlution.com

HOF Corindus Co.,Ltd. (Thailand only)

891 Rama3 Road, Bangpongpan, Yannawa, 10120 Bangkok
Tel: 02 284 1100 Fax: 02 683 4414 info@hofcorindus.co.th
www.hofcorindus.co.th