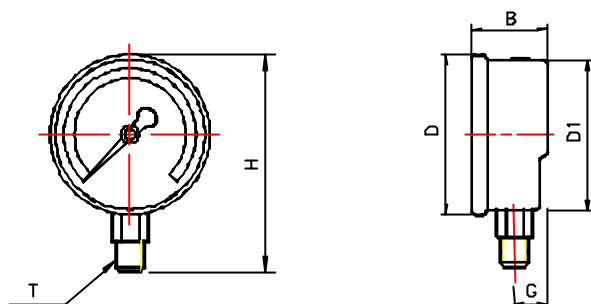


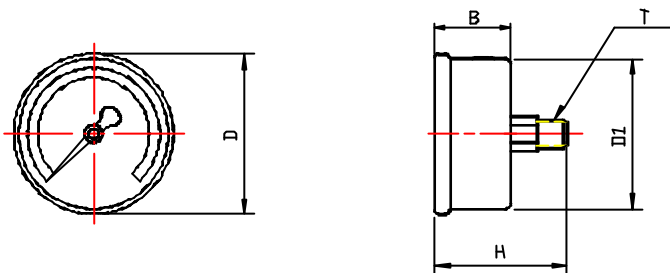
INSTALLATION DIMENSIONS

UNIT mm(inch)

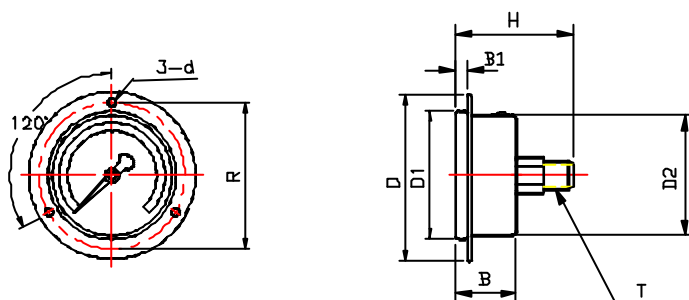
LM TYPE



CBM TYPE



CBM-F TYPE



MODEL	B	B1	D	D1	D2	G	H	T	d	R
G40LM	28.1(0.86)	--	φ48(1.9)	φ41.7(1.6)	--	8(0.31)	58.7(2.31)	1/8"	--	
G40CBM	26(1.02)	--	φ48(1.9)	φ41.5(1.6)	--	--	43(1.69)	1/8"	--	
G50LM	32(1.26)	--	φ57(2.2)	φ53(2.1)	--	10.5(0.41)	76(3.0)	1/4"	--	
G50CBM	26(1.02)	--	φ57(2.2)	φ51(2.0)	--	--	48(1.9)	1/4"	--	
G60LM	32(1.26)	--	φ71.5(2.8)	φ63.5(2.5)	--	11(0.43)	88.5(3.48)	1/4"	--	
G60CBM	33(1.30)	--	φ72(2.83)	φ63.5(2.5)	--	--	55(2.16)	1/4"	--	
G60CBM-F	33(1.30)	6.7(0.26)	φ87.5(3.4)	φ72(2.8)	63(2.48)	--	55(2.16)	1/4"	φ4.1(0.16)	80(3.15)
G100LM	40(1.57)	--	φ110(4.3)	φ99(3.89)	--	14(0.55)	141(5.55)	1/2"	--	
G100CBM	36(1.41)	--	φ110(4.3)	φ98(3.86)	--	--	74(2.91)	1/2"	--	
G100CBM-	36(1.41)	7.5(0.29)	φ131.8(5.1)	φ110(4.3)	φ98(3.85)	--	74(2.91)	1/2"	φ5(0.19)	117(4.61)

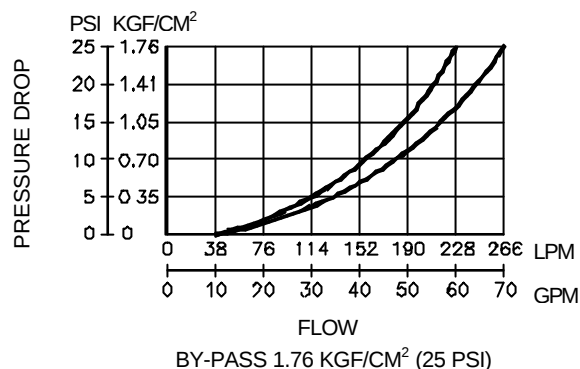
FEATURES

- Dirt indicator instructs when the filtering element needs replacement. No special tool needed for the change of element.
- Installed with 1/2 HP, 110/220VAC single phase motor for convenient plug-in application.
- Buggy is loaded on a portable hand-push cart, one unit can serve many stations.
- 10 micron and 25 micron element available for selection.
- With optional filter element (indicate: 10-W, when ordering), it can remove both dirt and water from system.



APPLICATION

- To use periodically as a supplement filtration system for all hydraulic systems in the plant.
- To clean the hydraulic system before and after the periodical maintenance or repair.
- To fill the oil for a new hydraulic system.
- To reclaim the contaminated oil.



HOW TO ORDER

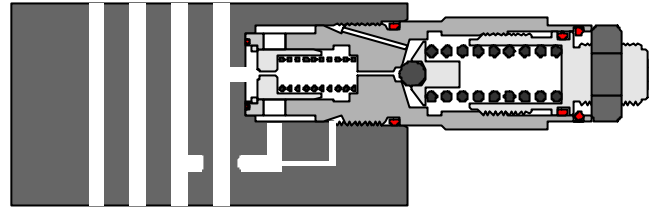
HFB - 10 - 20 - W

W: REMOVE DIRT AND WATER
(ONLY AVAILABLE WITH 10 MICRON ELEMENT)
OMITTED: REMOVE DIRT ONLY

FLOW
20: 20 LPM (5.3 GPM)
40: 40 LPM (10.6 GPM)

10: 10 MICRON
25: 25 MICRON

HIGH EFFICIENCY FILTRATION CARTS



SYMBOLS



P T B A

MRF-02P



P T B A

MRF-02A



P T B A

MRF-02B



P T B A

MRF-02D

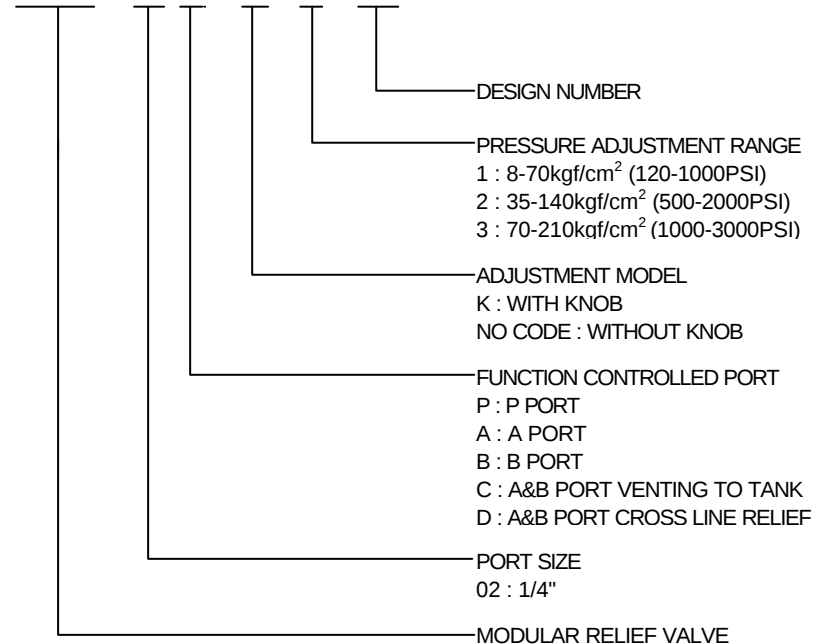


P T B A

MRF-02C

HOW TO ORDER

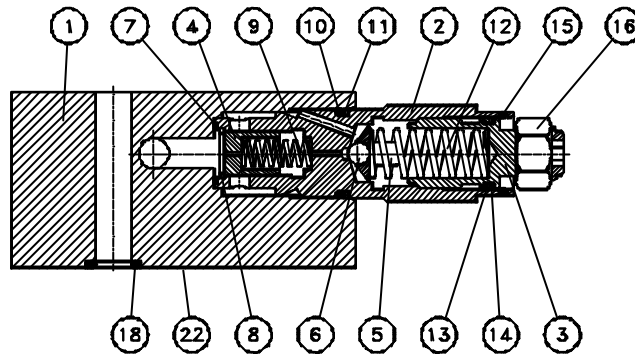
MRF - 02 P - K - 1 - 20



SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	35 LPM (9.3 GPM)



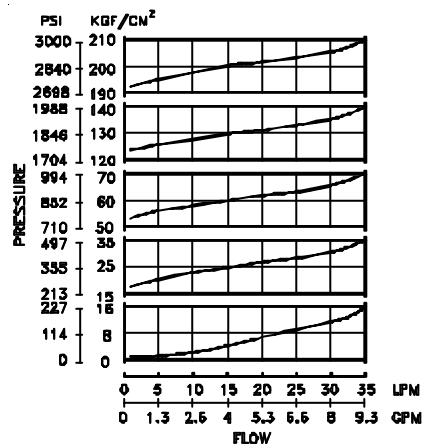


NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
7	O-RING	M12	14	BACK-UP RING	AS568-014
10	O-RING	AS568-017(70°)	18	O-RING	AS568-012(90°)
13	O-RING	AS568-014(70°)			

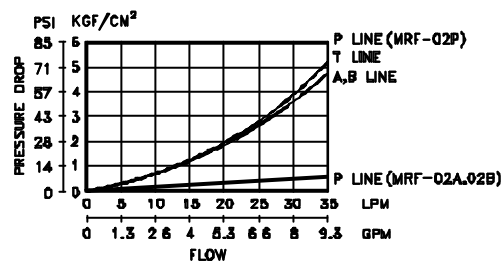
PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt
(175 SSU)

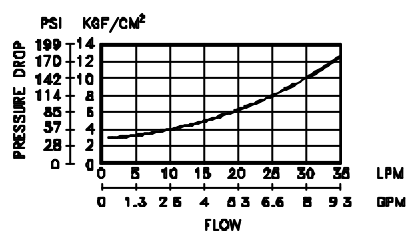
NOMINAL OVERRIDE CHARACTERISTICS



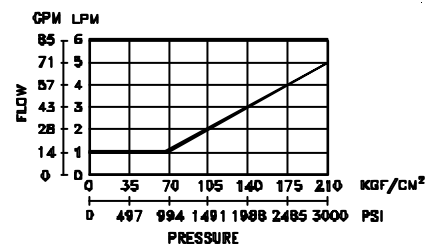
PRESSURE DROP



MIN. ADJUSTMENT PRESSURE



MIN. FLOW CHARACTERISTICS

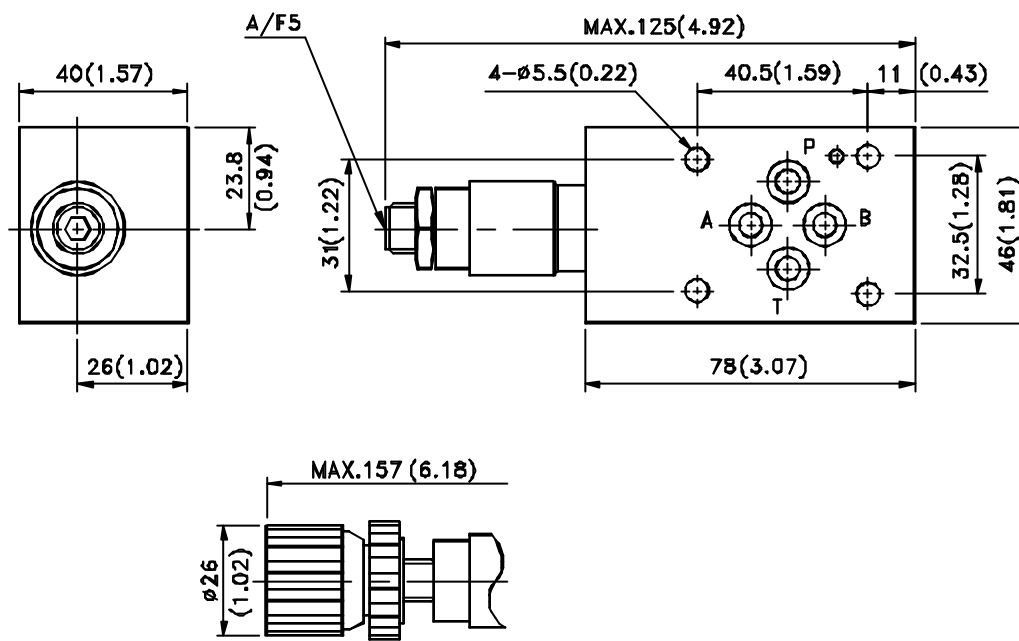


INSTALLATION DIMENSIONS

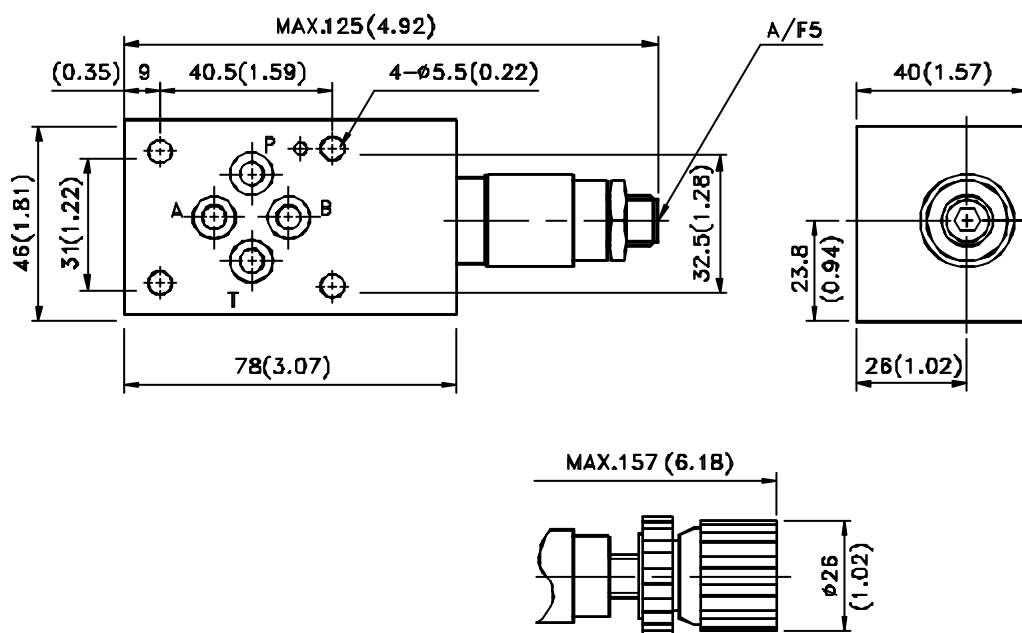
MRF - 02A - * - * - 20

UNIT: mm (inch)

WEIGHT: 1.5kgs (3.3 lbs)

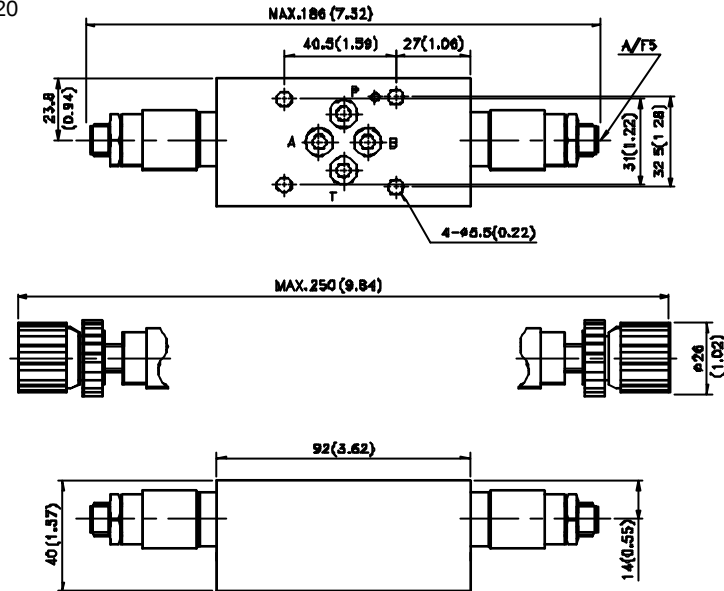


MRF - 02P/B - * - * - 20

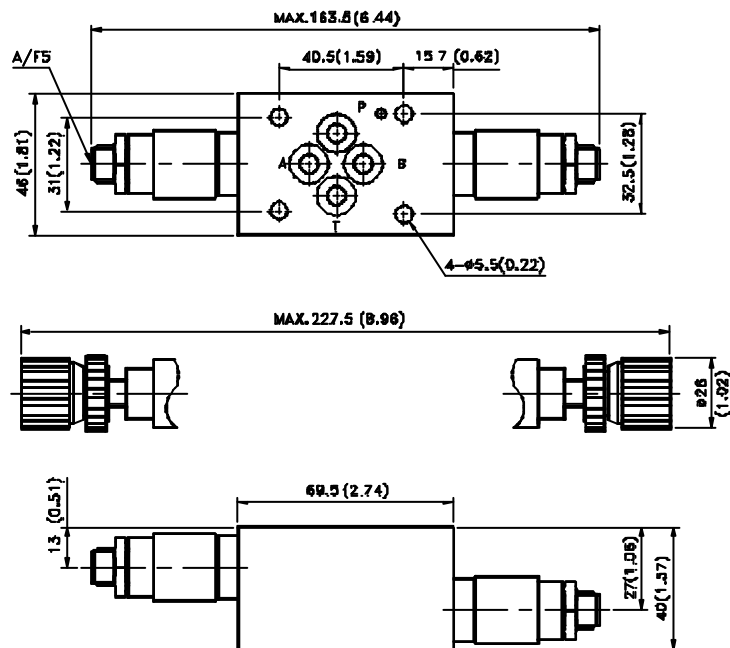


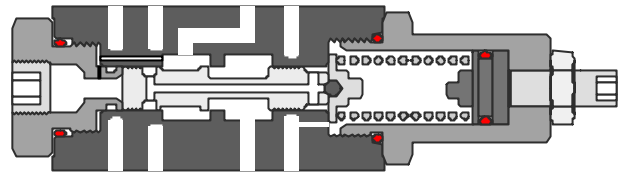
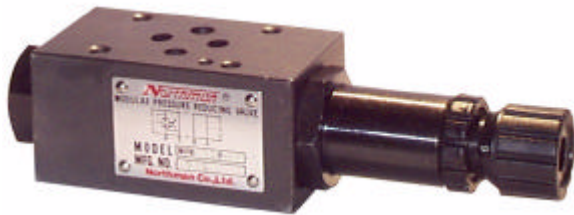
UNIT: mm(inch)
WEIGHT: 1.7 kgs(3.75 lbs)

MRF - 02C - * - * - 20



MRF - 02D - * - * - 20





SYMBOLS



MPR-02P



MPR-02A



MPR-02B

HOW TO ORDER

MPR - 02 P - K - 1 - 20 - N

NO CODE : GAUGE PORT PT THREADS
N : GAUGE PORT NPT THREADS

DESIGN NUMBER

PRESSURE ADJUSTMENT RANGE
0 : 1.5-35kgf/cm² (20-500PSI)
1 : 8-70kgf/cm² (120-1000PSI)
2 : 35-140kgf/cm² (500-2000PSI)
3 : 70-210kgf/cm² (1000-3000PSI)

ADJUSTMENT MODEL
K: WITH KNOB
NO CODE: WITHOUT KNOB

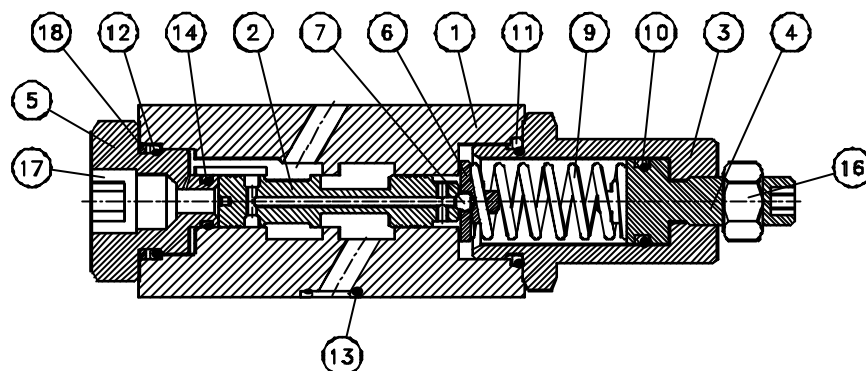
FUNCTION CONTROL PORT
P : P PORT
A : A PORT
B : B PORT

PORT SIZE
02 : 1/4"

MODULAR PRESSURE REDUCING VALVE

SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	35 LPM (9.3 GPM)

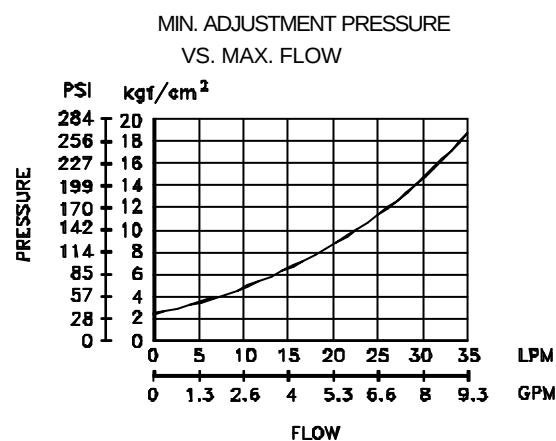
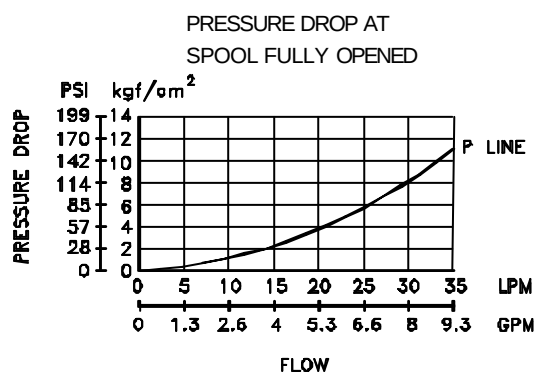
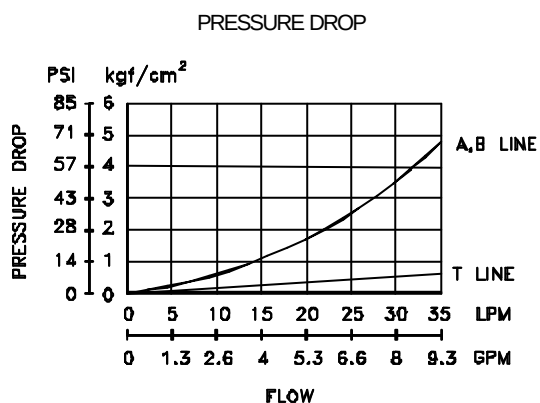


NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
10	O-RING	P14(70°)	13	O-RING	AS568-02(90°)
11	O-RING	P22(90°)	14	O-RING	P8(70°)
12	O-RING	P20(90°)	18	BACK-UP RING	P20

PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

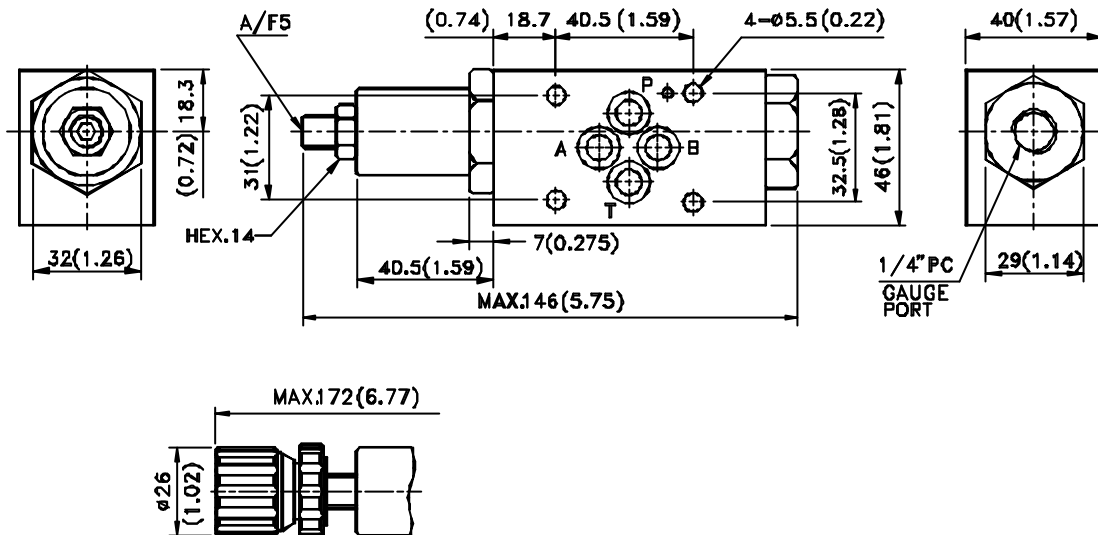


INSTALLATION DIMENSIONS

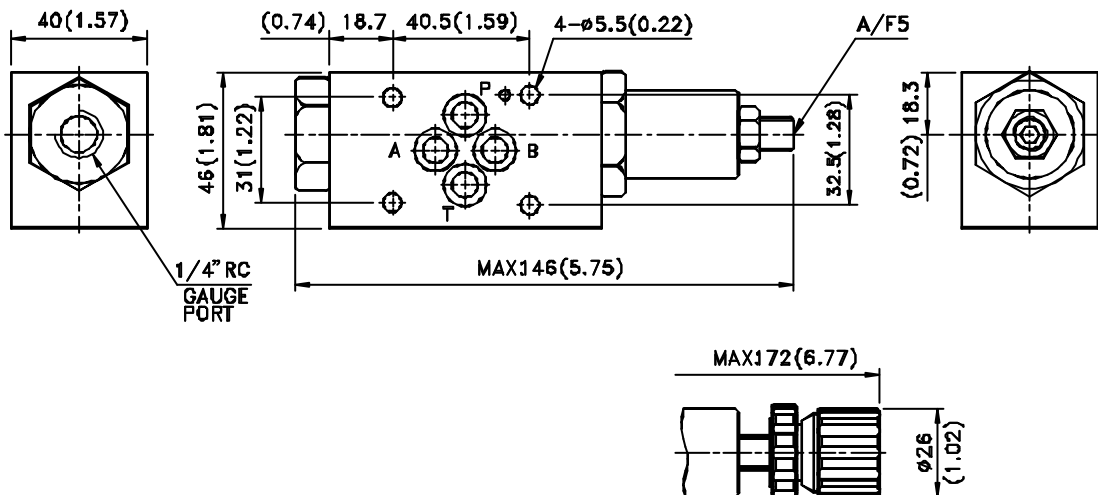
MPR - 02B - * - * - 20

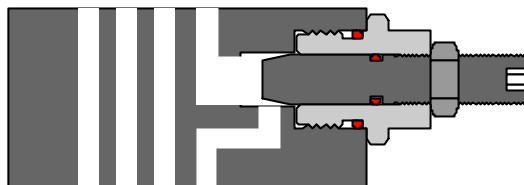
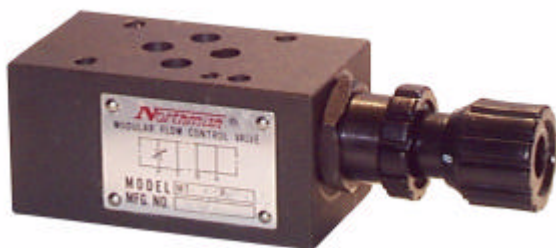
UNIT: mm(inch)

WEIGHT: 1.2 kgs(2.65 lbs)



MPR - 02P/A - * - * - 20





SYMBOLS

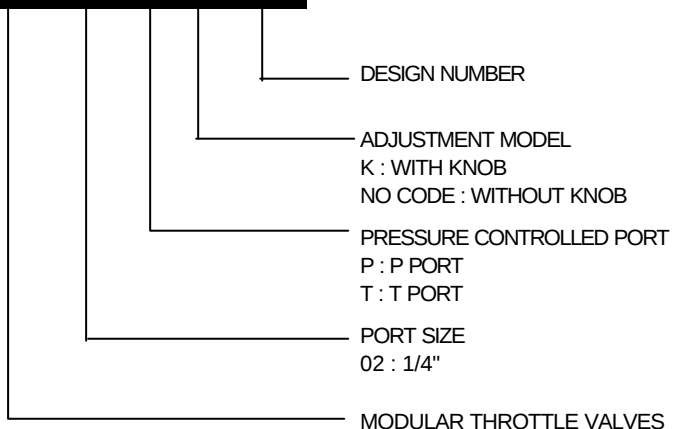


P T B A
MT-02P



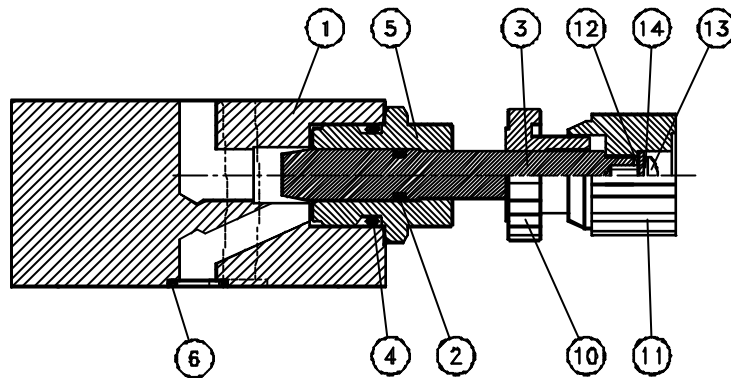
P T B A
MT-02T

HOW TO ORDER



SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	35 LPM (9.3 GPM)

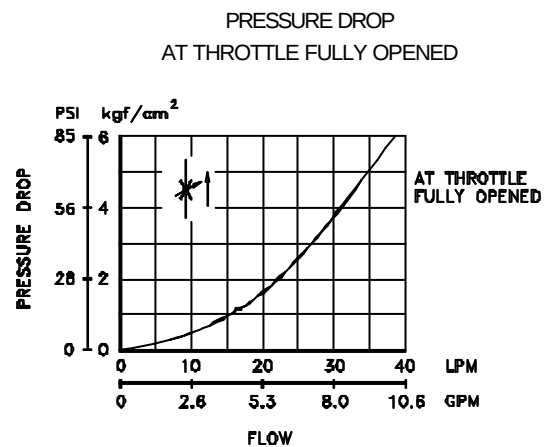
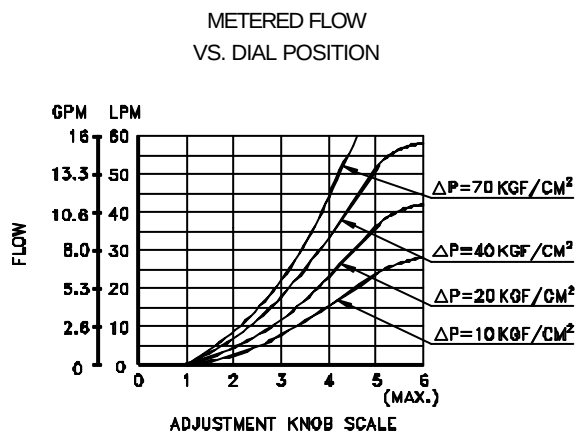
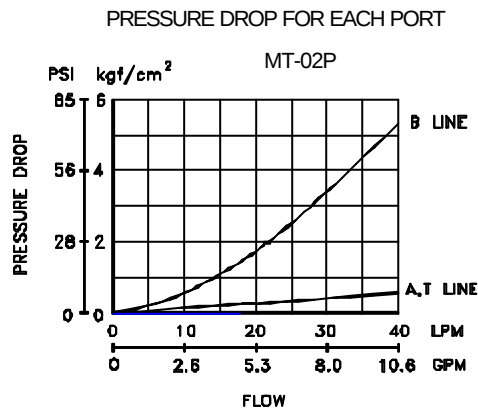


NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
2	O-RING	P8(90°)	6	O-RING	AS568-012(90°)
4	O-RING	P18(90°)			

PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

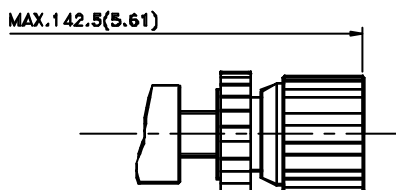
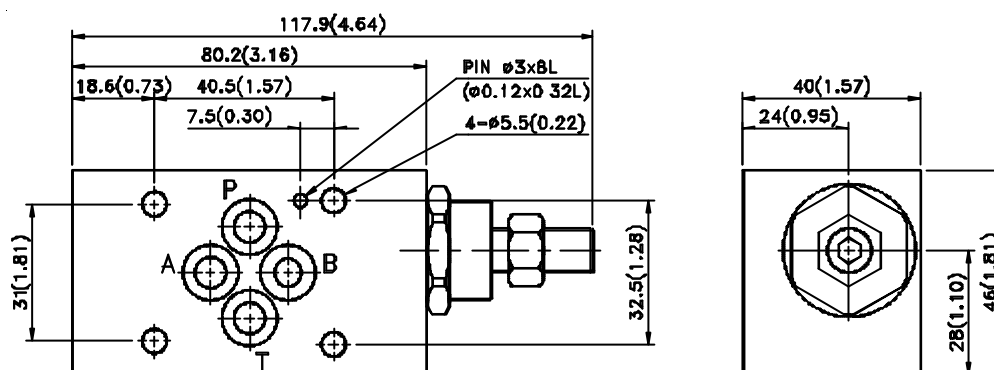


INSTALLATION DIMENSIONS

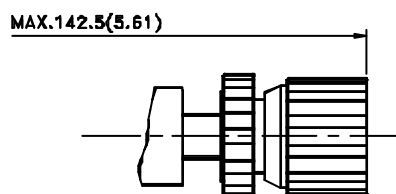
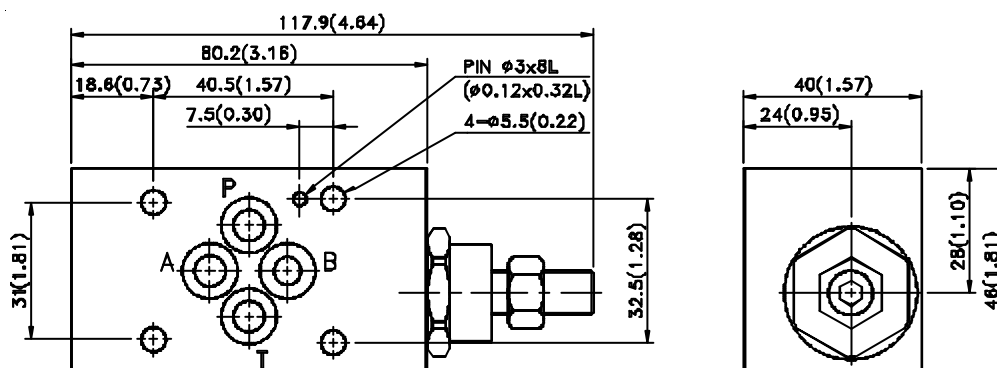
MT - 02P - K - 30

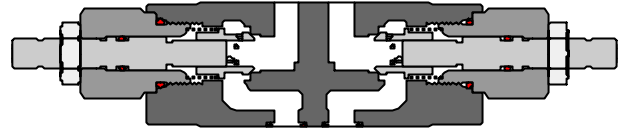
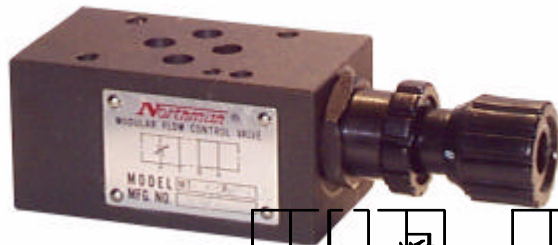
UNIT: mm(inch)

WEIGHTS: 1.2 kgs(2.65 lbs)

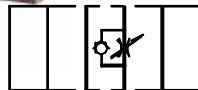


MT - 02 - K - 30





P T B A
MT-02A



P T B A
MT-02B

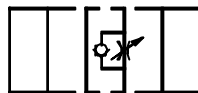


P T B A
MT-02W

SYMBOLS



P T B A
MT-02A-I



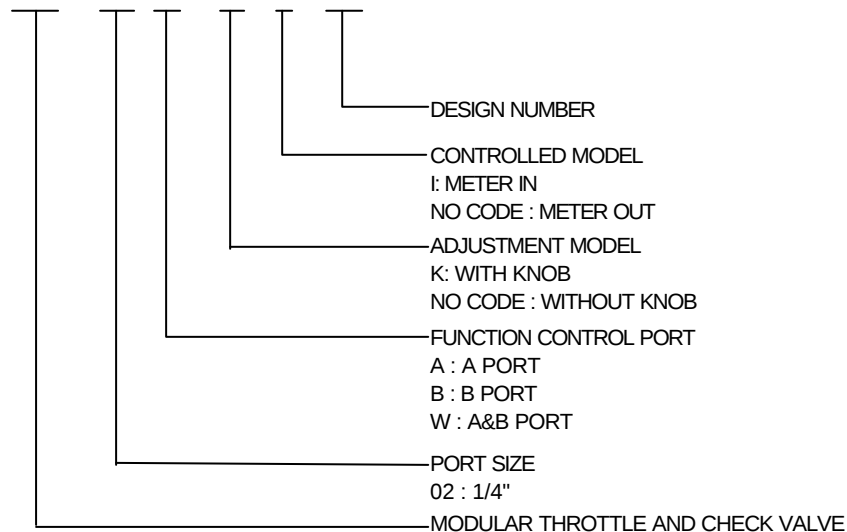
P T B A
MT-02B-I



P T B A
MT-02W-I

HOW TO ORDER

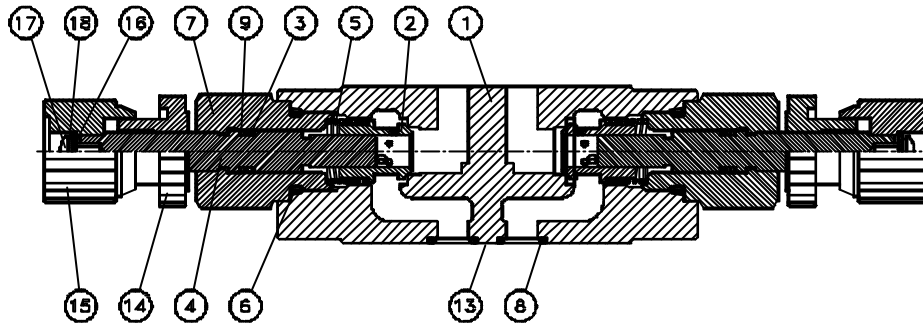
MT - 02 W - K - I - 30



SPECIFICATIONS



MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	35 LPM (9.3 GPM)

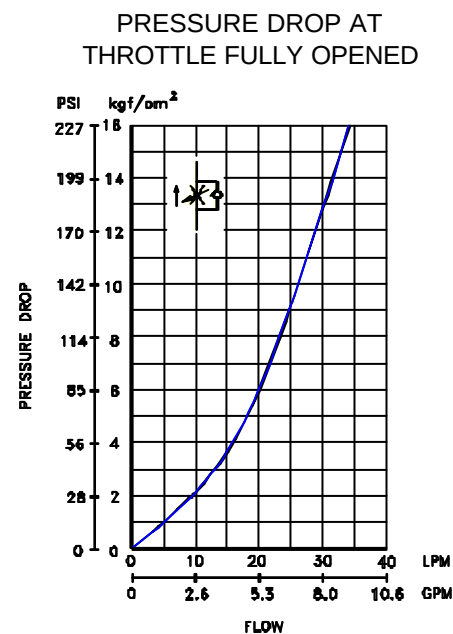
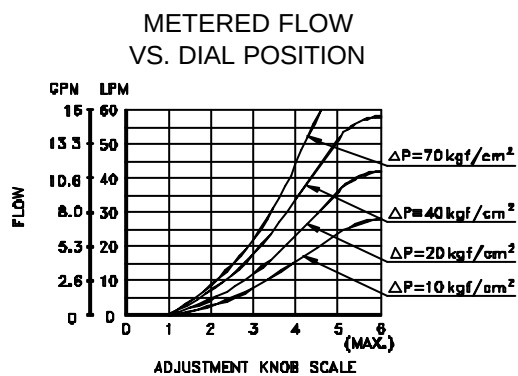
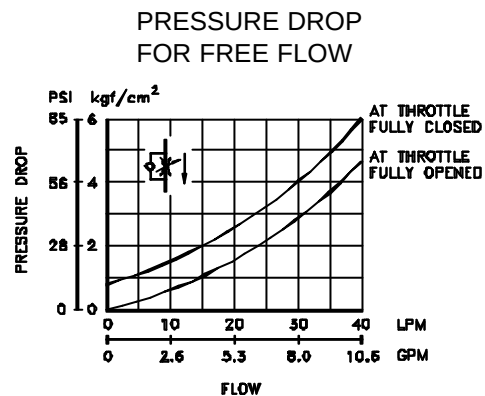
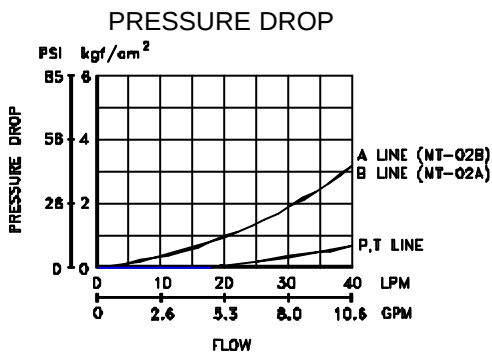


NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
3	O-RING	P8(90°)	8	O-RING	AS568-012(90°)
6	O-RING	P18(90°)	9	BACK-UP RING	P8

PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

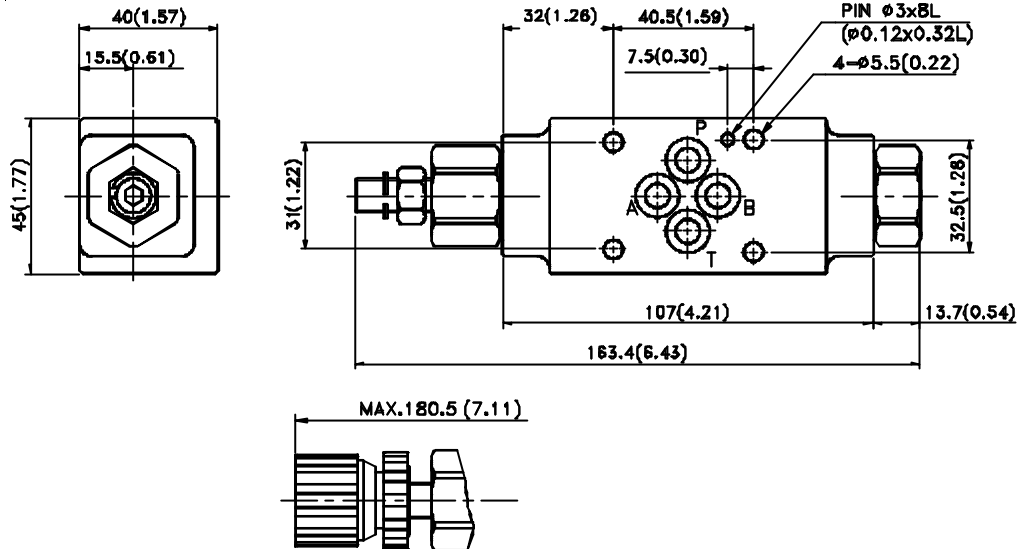


INSTALLATION DIMENSIONS

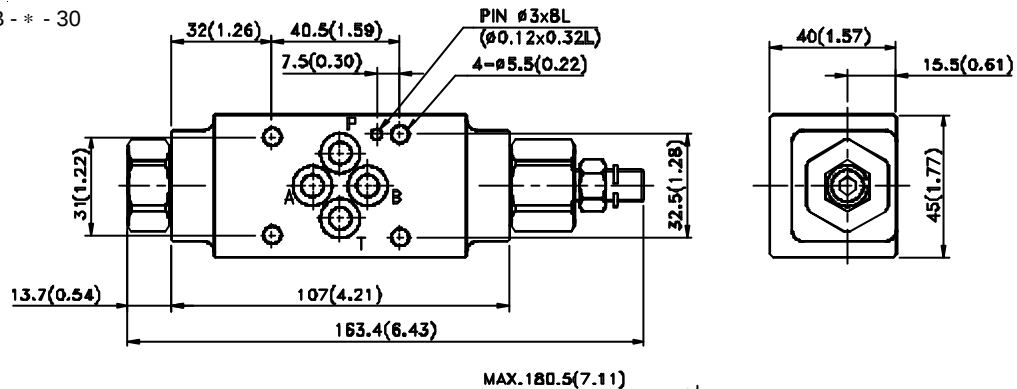
MT - 02A - * - 30

UNIT: mm(inch)

WEIGHT: 1.2 kgs(2.65 lbs)



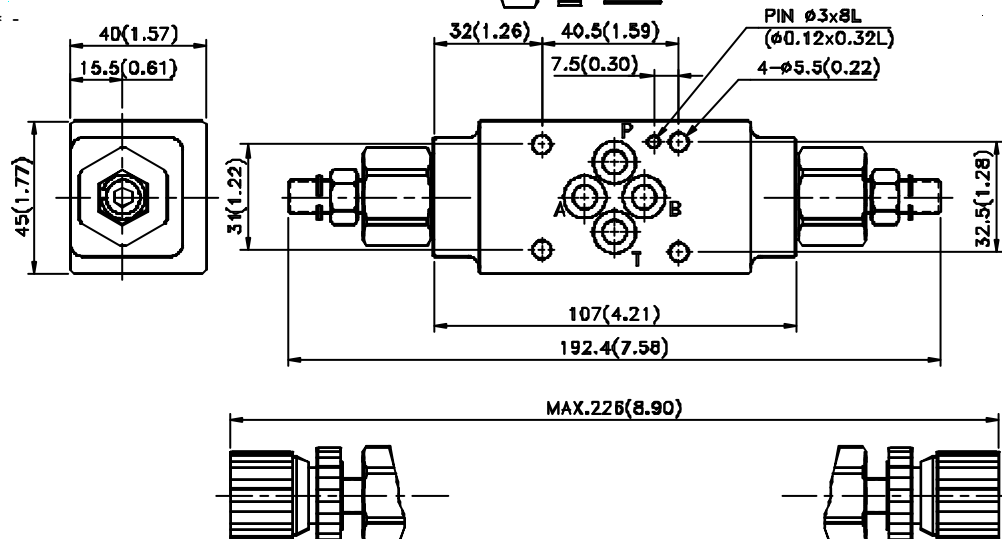
MT - 02B - * - 30

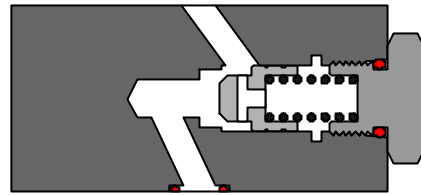


UNIT : mm(inch)

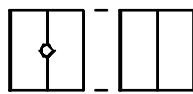
WEIGHT: 1.4 kgs(3.1

MT - 02W - * - * -



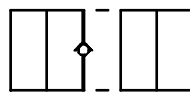


SYMBOLS



P T B A

MC-02P



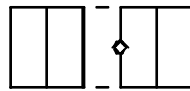
P T B A

MC-02T



P T B A

MC-02A



P T B A

MC-02B

HOW TO ORDER

MC - 02 P - 50 - 20

DESIGN NUMBER

CRACKING PRESSURE
05 : 0.35kgf/cm² (7 PSI)
50 : 3.5kgf/cm² (50 PSI)

FUNCTION CONTROLLED PORT

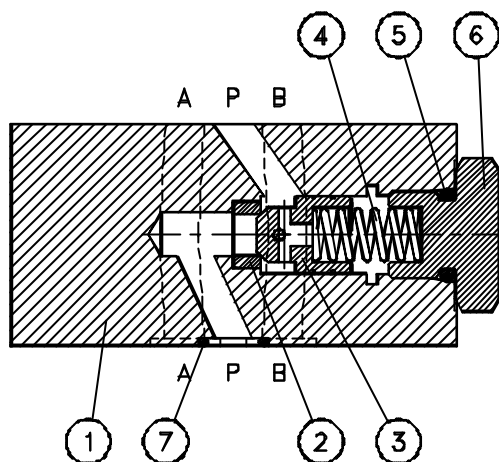
P : P PORT
A : A PORT
B : B PORT
T : T PORT

PORT SIZE
02 : 1/4"

MODULAR CHECK VALVE

SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	35 LPM (9.3 GPM)



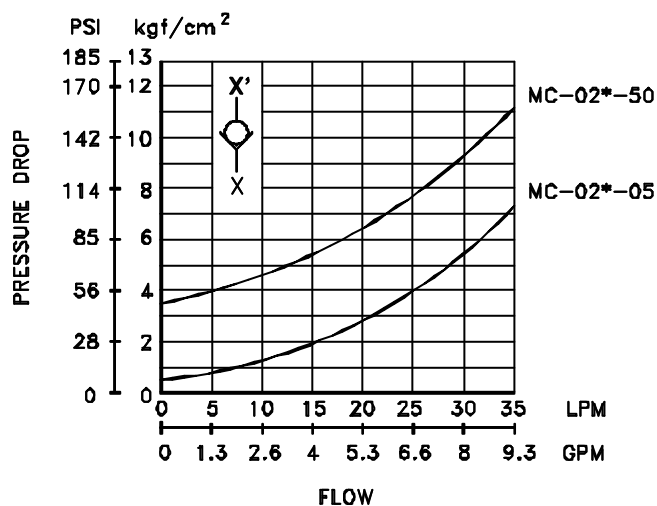
NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
5	O-RING	P12.5(90°)	7	O-RING	AS568-012(90°)

PERFORMANCE CURVES

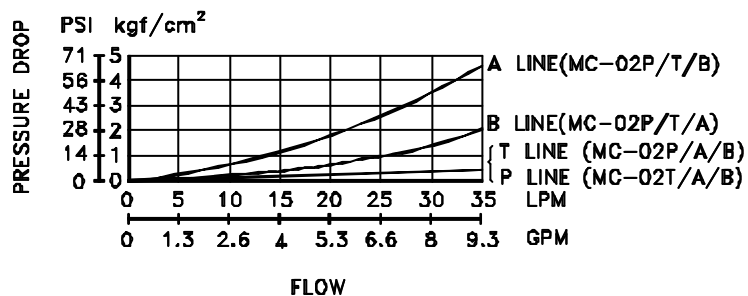
TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

PRESSURE DROP
FOR FREE FLOW



PRESSURE DROP

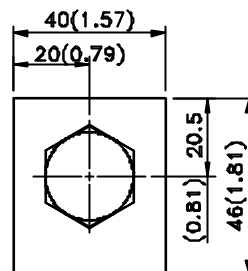
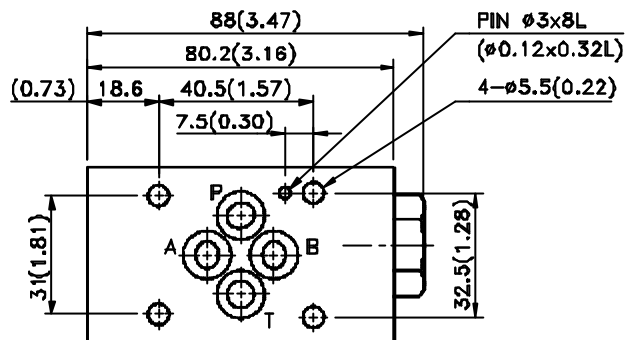


INSTALLATION DIMENSIONS

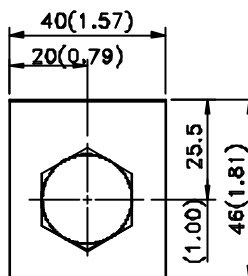
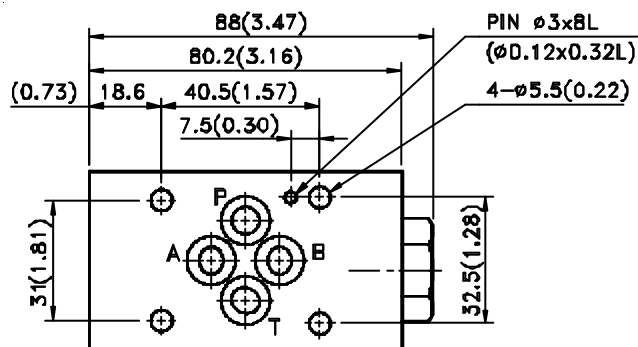
MC - 02P - ** - 20

UNIT: mm(inch)

WEIGHT: 1.2 kgs(2.65 LBS)



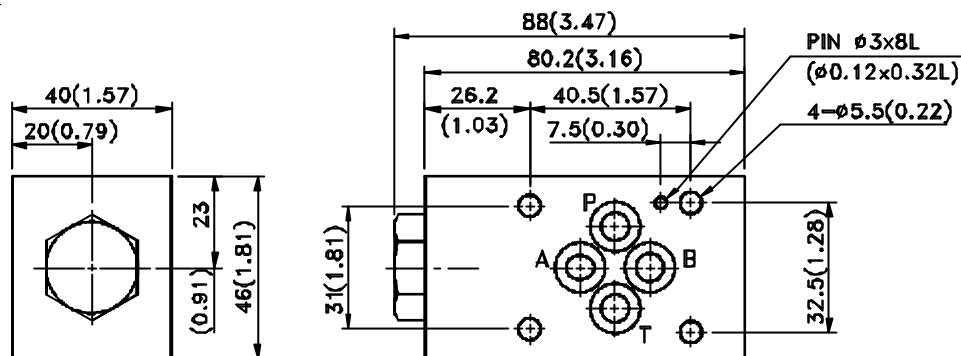
MC - 02T - ** - 20



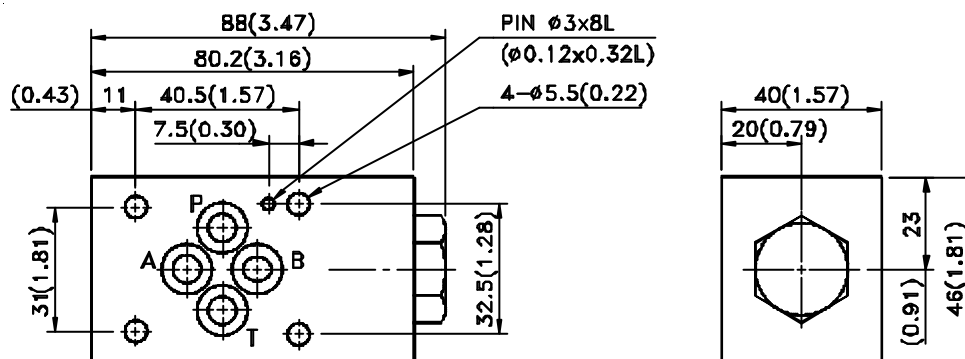
MC - 02A - ** - 20

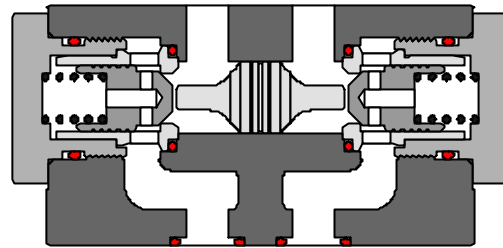
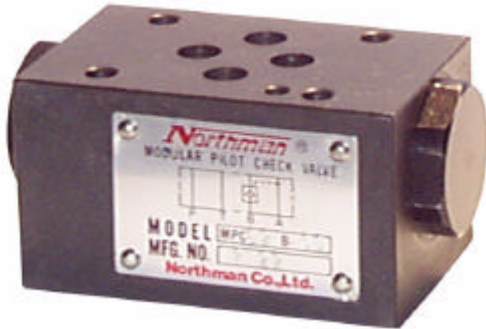
UNIT: mm(inch)

WEIGHT: 1.2 kgs(2.65 lbs)



MC - 02B - ** - 20

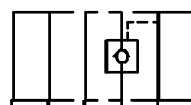




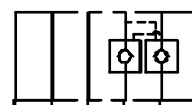
SYMBOLS



P T B A
MPC-02A



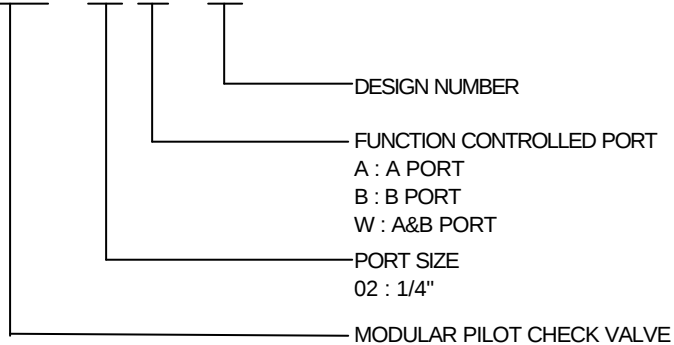
P T B A
MPC-02B



P T B A
MPC-02W

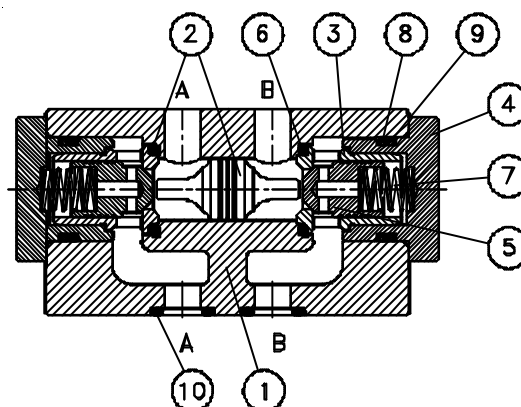
HOW TO ORDER

MPC - 02 W - 30



SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	35 LPM (9.3 GPM)
CRACKING PRESSURE IN FREE FLOW	0.6 kgf/cm ² (8.5 PSI)
PILOT RATIO	1 : 2.25

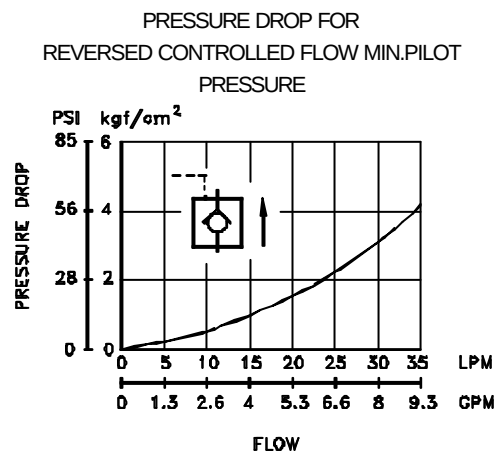
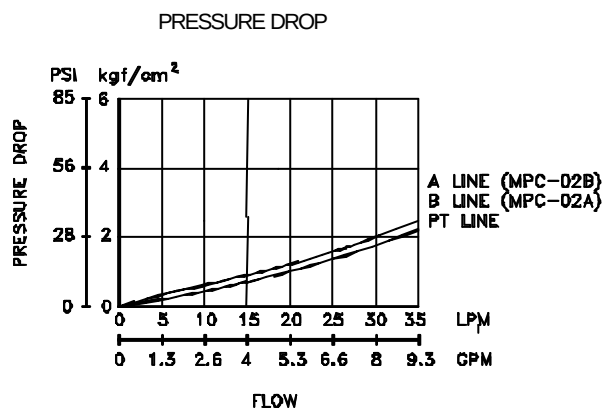
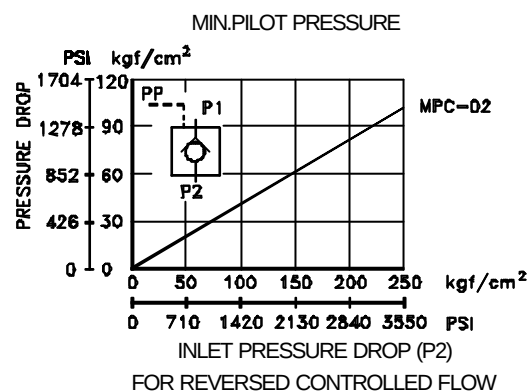
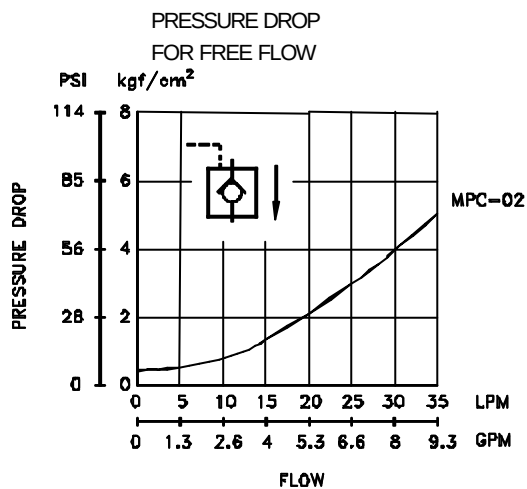


NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
6	O-RING	AS568-015(70°)	9	BACK-UP RING	AS568-017
8	O-RING	AS568-017(70°)	10	O-RING	AS568-012(90°)

PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

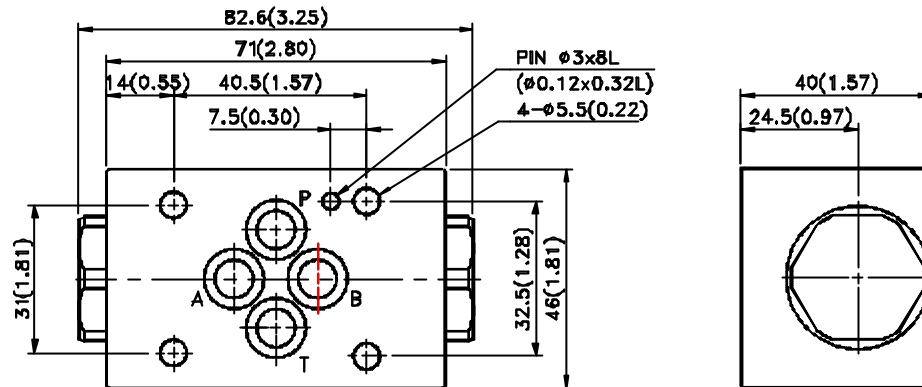


INSTALLATION DIMENSIONS

MPC - 02* - 30

UNIT: mm(inch)

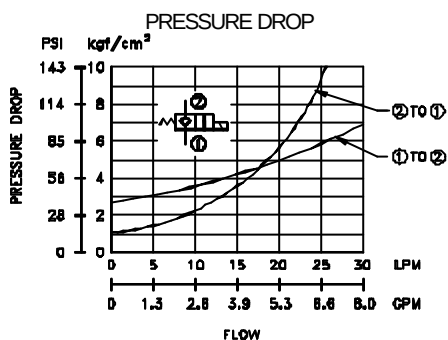
WEIGHT: 1.1 kgs(2.43 LBS)



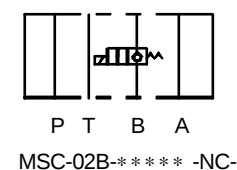
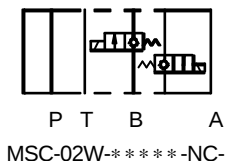


PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)
TEST TEMPERATURE : 50°C (122°F)



SYMBOLS



HOW TO ORDER

MSC - 02 W - 230 AP - NC - 10

- OPTION
- 10: W/O MANUAL-OVERRIDE OPTION
- 20: W/I MANUAL-OVERRIDE OPTION
- VALVE CONFIGURATION
- NC: NORMALLY-CLOSED
- TERMINATIONS
- AP: 1/2" CONDUIT FOR AC COIL AG: DIN CONNECTOR FOR AC COIL
- DP: 1/2" CONDUIT FOR DC COIL DG: DIN CONNECTOR FOR DC COIL
- VALVE CONFIGURATION
- 12 : 12VDC
- 24 : 24VDC
- 115 : 115VAC
- 230 : 230VAC
- CONTROL SERIES
- W: A,B LINE
- A: A LINE
- B: B LINE
- NOMINAL SIZE
- 02: 1/4"
- MODULAR SOLENOID CHECK VALVE

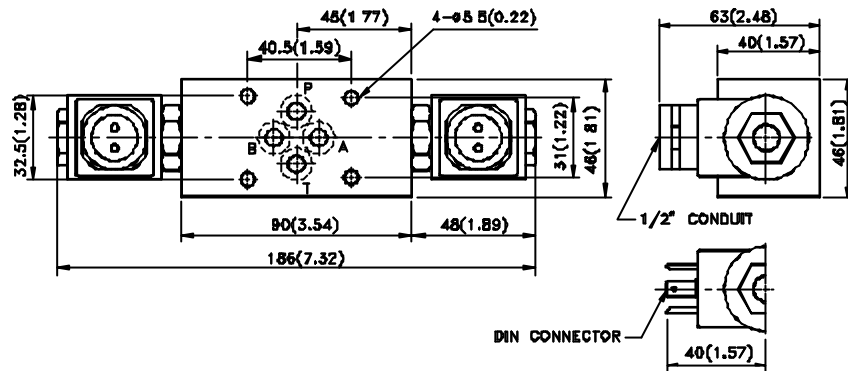
SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm (3000 PSI)
MAX. FLOW CAPACITY	30 LPM (8 GPM)

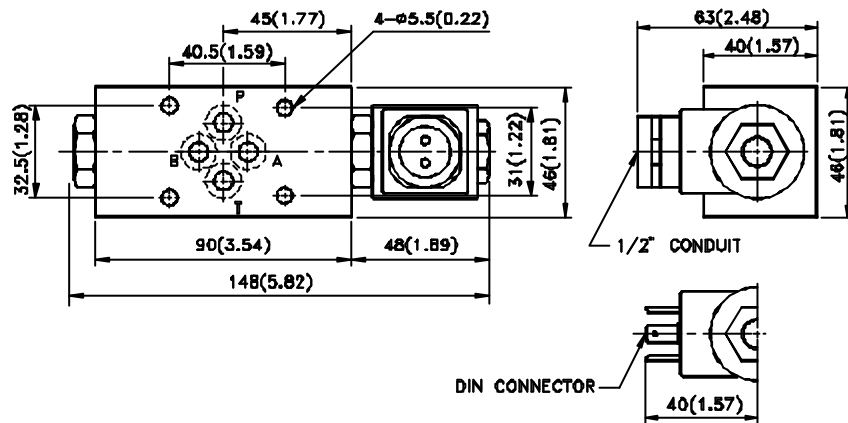
INSTALLATION DIMENSIONS

MSC - 02W - * - * - * - *

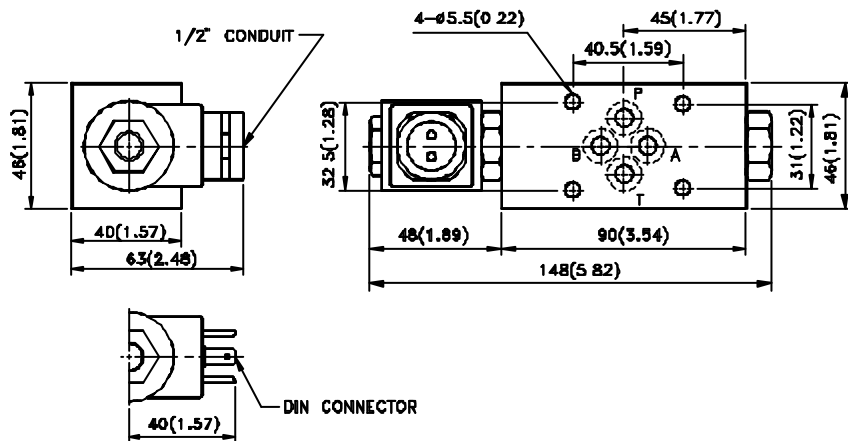
UNIT: mm(inch)

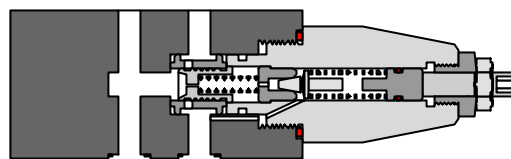


MSC - 02A - * - * - * - *



MSC - 02B - * - * - * - *





SYMBOLS



P T B A

MRF-03P



P T B A

MRF-03A



P T B A

MRF-03B



PT B A

MRF-03D



PT B A

MRF-03C

HOW TO ORDER

MRF - 03 P - K - 1 - 30

DESIGN NUMBER

PRESSURE ADJUSTMENT RANGE
1 : 8-70kgf/cm² (120-1000PSI)
2 : 35-140kgf/cm² (500-2000PSI)
3 : 70-210kgf/cm² (1000-3000PSI)

ADJUSTMENT MODEL

K : WITH KNOB

NO CODE : WITHOUT KNOB

FUNCTION CONTROLLED PORT

P : P PORT

A : A PORT

B : B PORT

C : A&B PORT VENTING TO TANK

D : A&B PORT CROSS LINE RELIEF

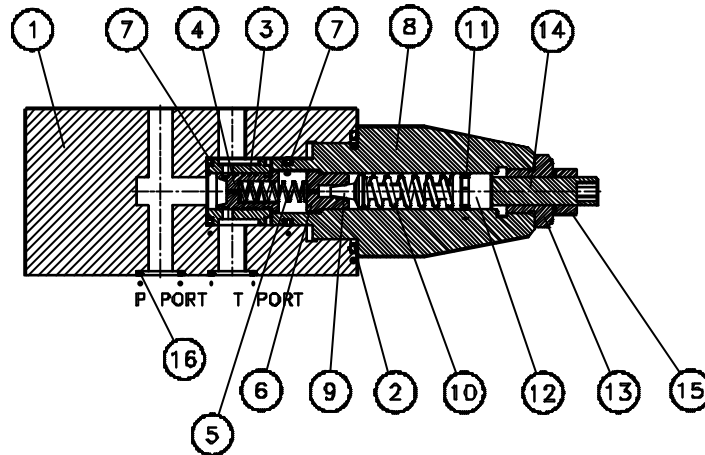
PORT SIZE

03 : 3/8"

MODULAR RELIEF VALVE

SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	70 LPM (20 GPM)



NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
2	O-RING	G35(70°)	11	O-RING	P9(70°)
7	O-RING	P18(70°)	16	O-RING	AS568-014(90°)

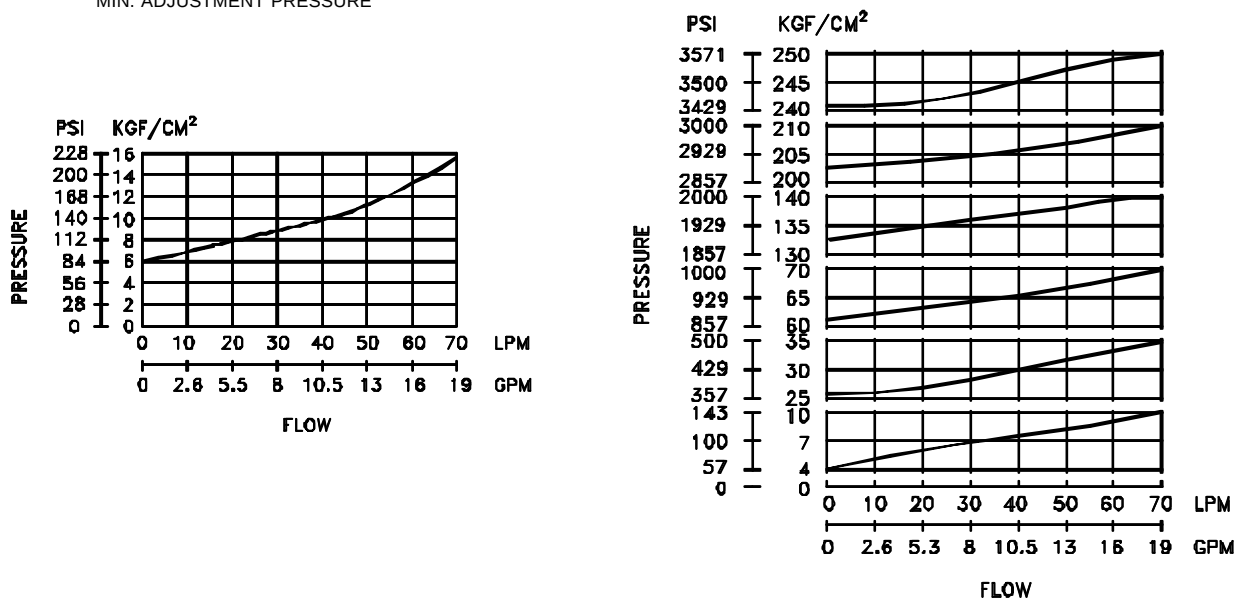
PERFORMANS CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

NOMINAL OVERRIDE
CHARACTERISTICS

MIN. ADJUSTMENT PRESSURE

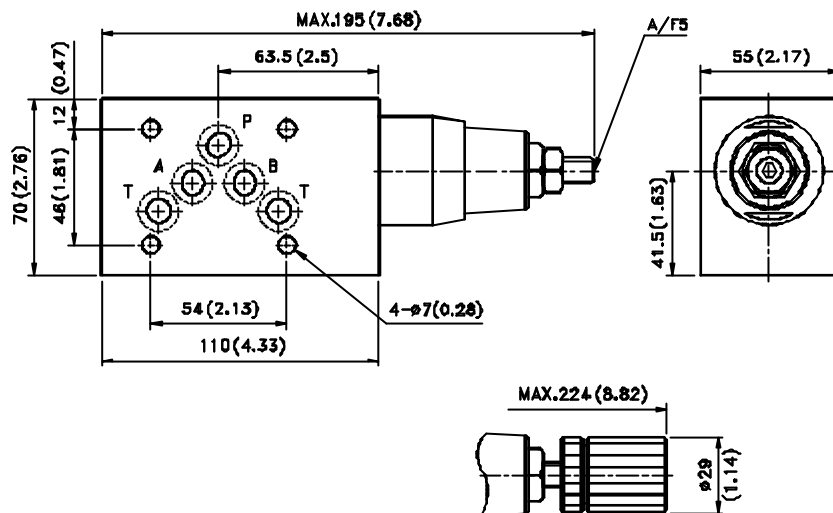




INSTALLATION DIMENSIONS

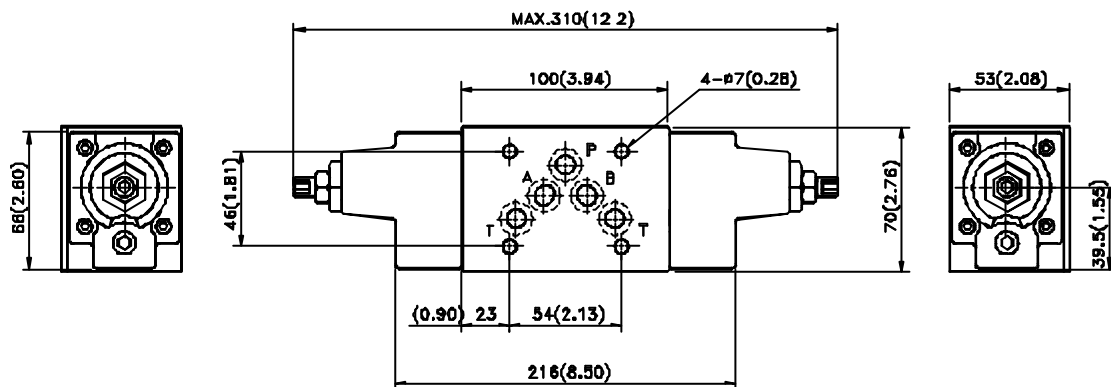
MRF-03P/A/B-*- *-30

UNIT: mm(inch)
WEIGHT :3.3kgs(7.28lbs)

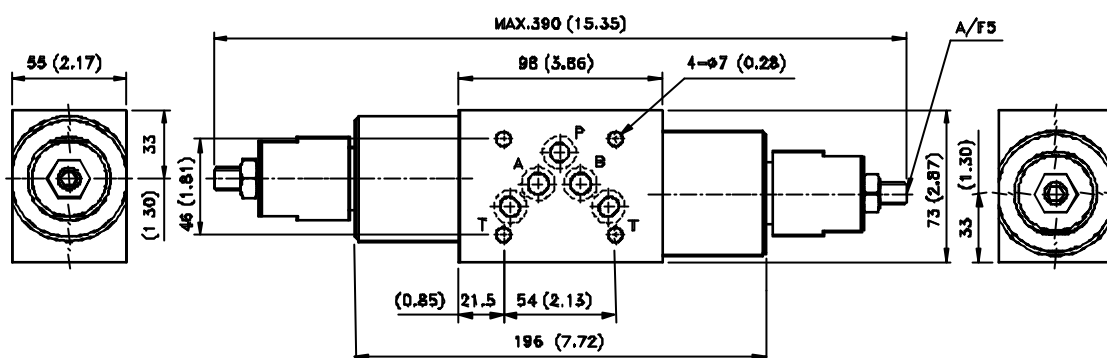


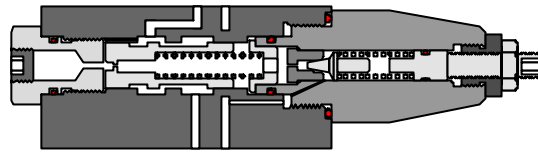
MRF - 03C - * - * - 30

WEIGHT: 3.7 kgs(8.16 lbs)



MRF - 03D - * - * - 30





SYMBOLS



P T B A

MPR-03P



P T B A

MPR-03A



P T B A

MPR-03B

HOW TO ORDER

MPR - 03 P - K - 0 - 30 - N

NO CODE : GAUGE PORT PT THREADS
N : GAUGE PORT NPT THREADS

DESIGN NUMBER

PRESSURE ADJUSTMENT RANGE
0 : 3-35kgf/cm² (40-500PSI)
1 : 8-70kgf/cm² (120-1000PSI)
2 : 35-140kgf/cm² (500-2000PSI)
3 : 70-210kgf/cm² (1000-3000PSI)

ADJUSTMENT MODEL
K : WITH KNOB
NO CODE : WITHOUT KNOB

FUNCTION CONTROLLED PORT
P : P PORT
A : A PORT
B : B PORT

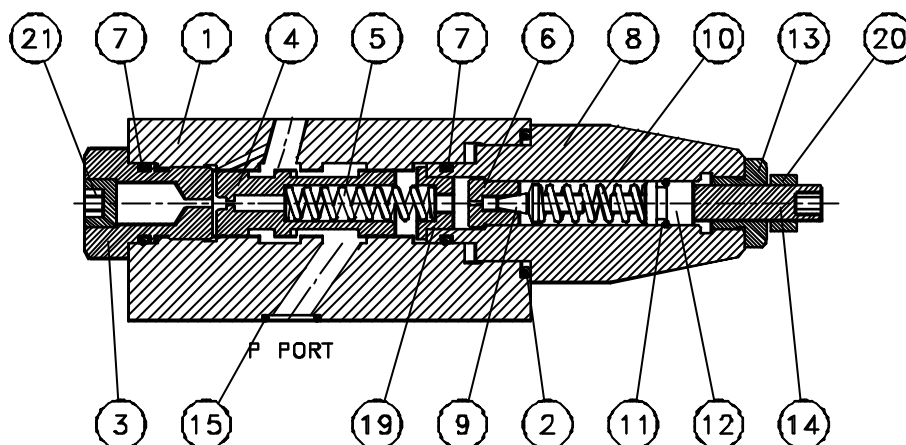
PORT SIZE
03 : 3/8"

MODULAR PRESSURE REDUCING VALVE

SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	70 LPM (20 GPM)





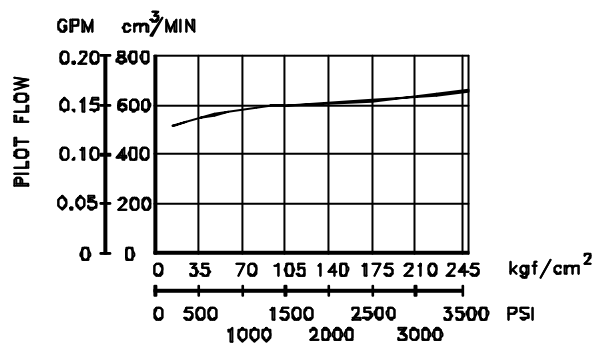
NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
2	O-RING	G35(70°)	11	O-RING	P9(70°)
7	O-RING	P18(70°)	15	O-RING	AS568-014(90°)

PERFORMANCE CURVES

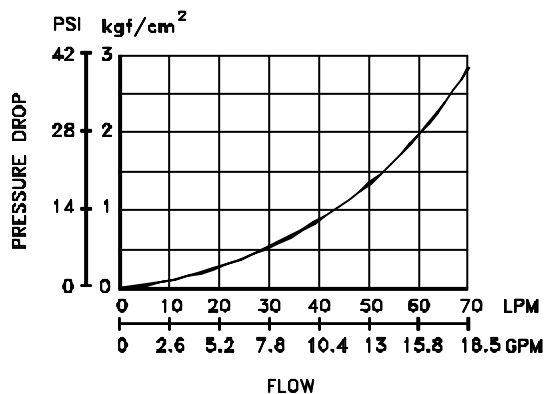
TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

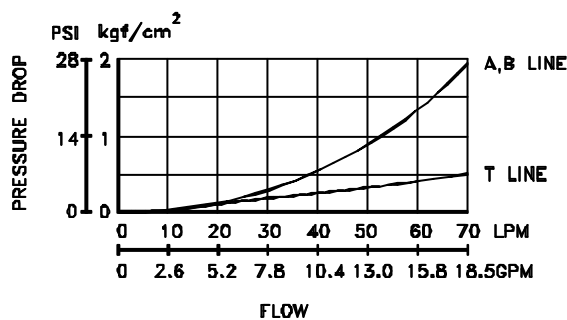
PILOT FLOW CHART



PRESSURE DROP AT SPOOL
FULLY OPENED (P-LINE)



PRESSURE DROP (P1-P2)



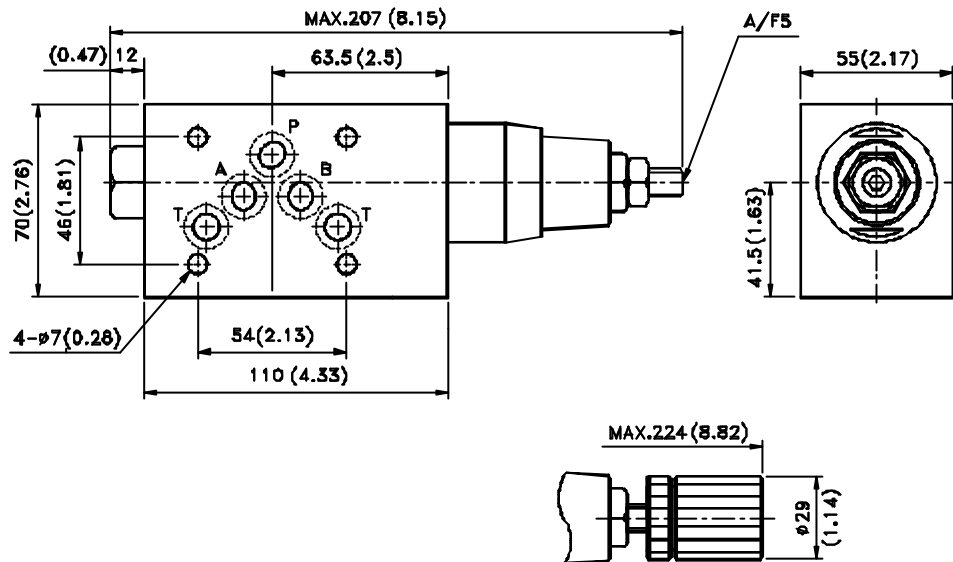


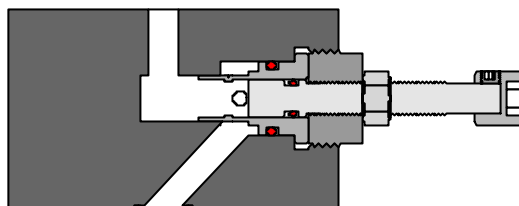
INSTALLATION DIMENSIONS

MPR - 03* - * - * - 30

UNIT: mm(inch)

WEIGHT : 3.4kgs(7.50lbs)



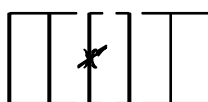


SYMBOLS



P T B A

MT-03P

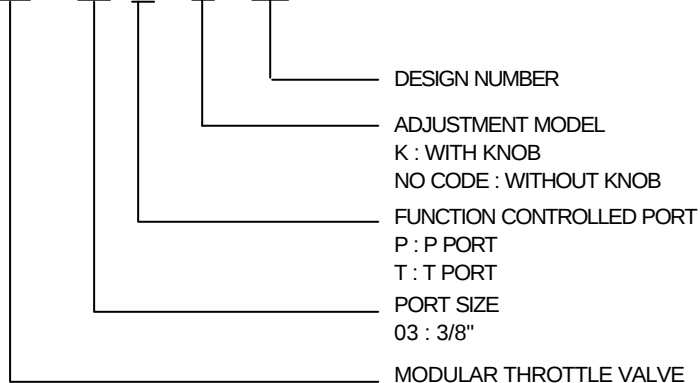


P T B A

MT-03T

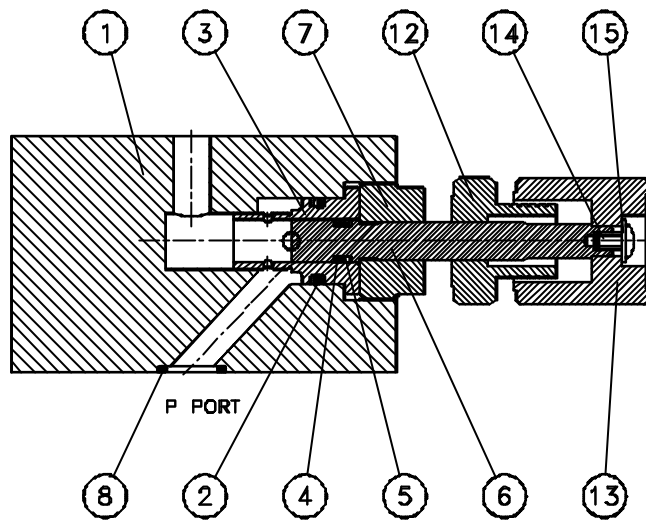
HOW TO ORDER

MT - 03 P - K - 30



SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	70 LPM (20 GPM)

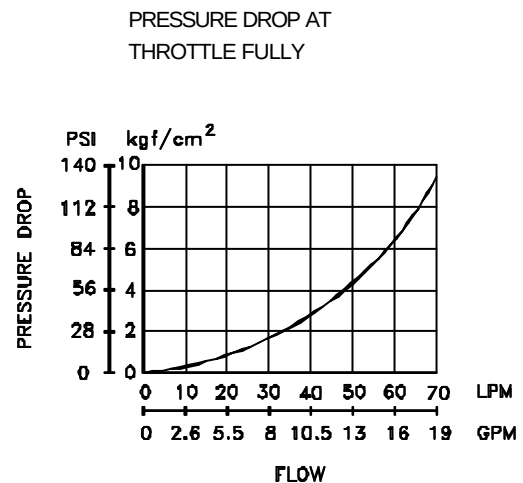
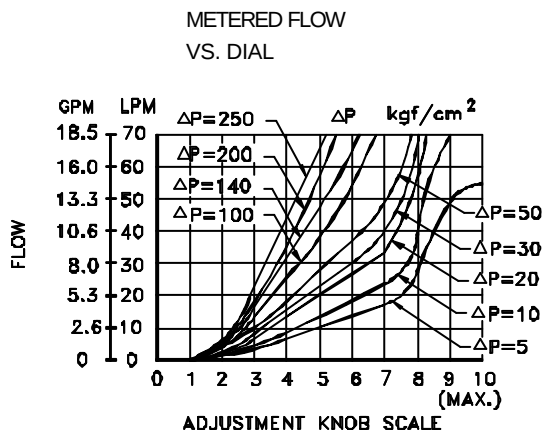
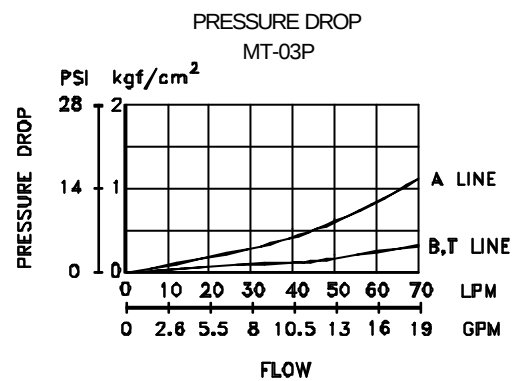


NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
2	O-RING	P16(70)	5	BACK-UP RING	P7
4	O-RING	P7(70)	8	O-RING	AS568-014(90)

PERFORMANCE CURVES

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C(122°F)



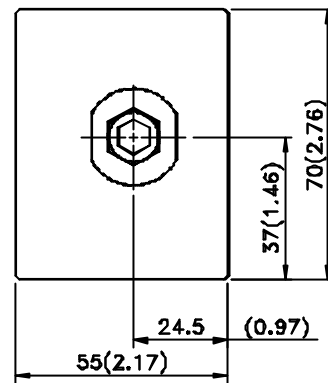
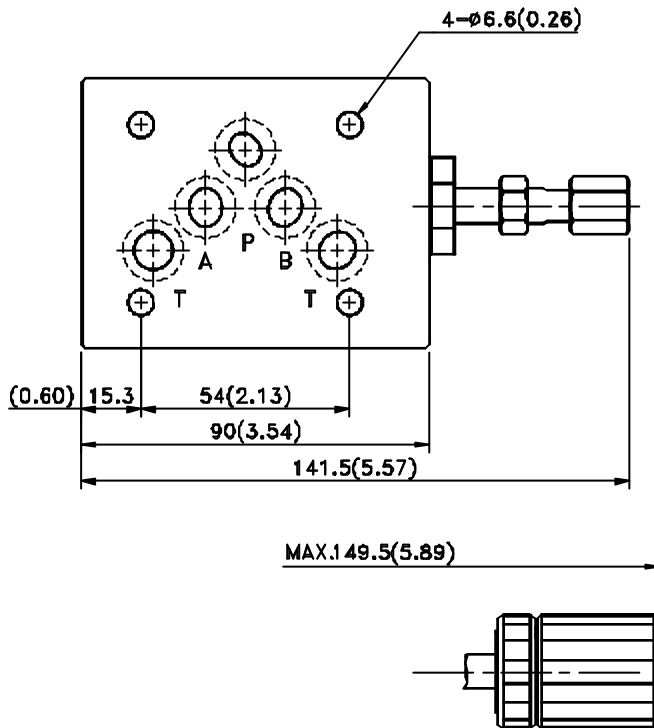


INSTALLATION DIMENSIONS

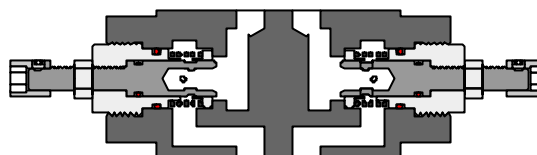
MT - 03P – K - 30

UNIT: mm(inch)

WEIGHT :2.4kgs(5.29lbs)



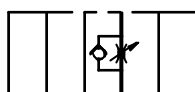
MAX.1 49.5(5.89)



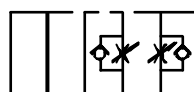
SYMBOL



P T B A
MT-03A



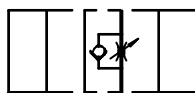
P T B A
MT-03B



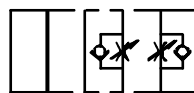
P T B A
MT-03W



P T B A
MT-03A-I

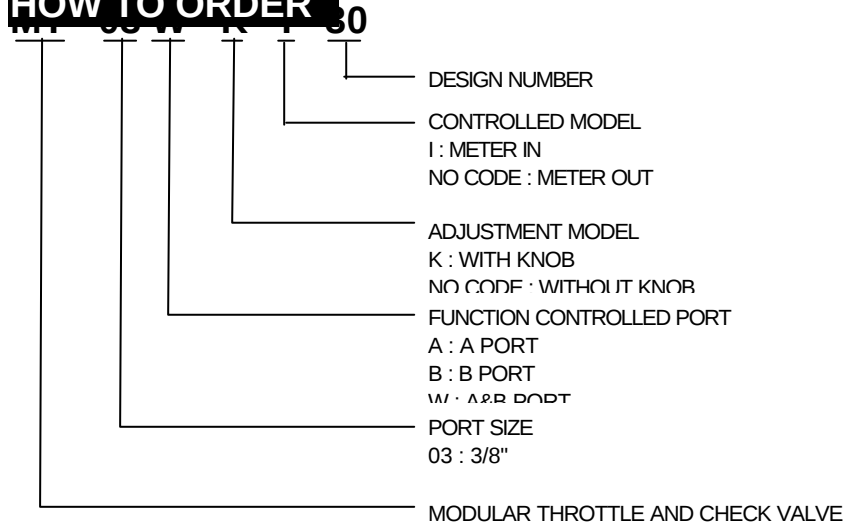


P T B A
MT-03B-I



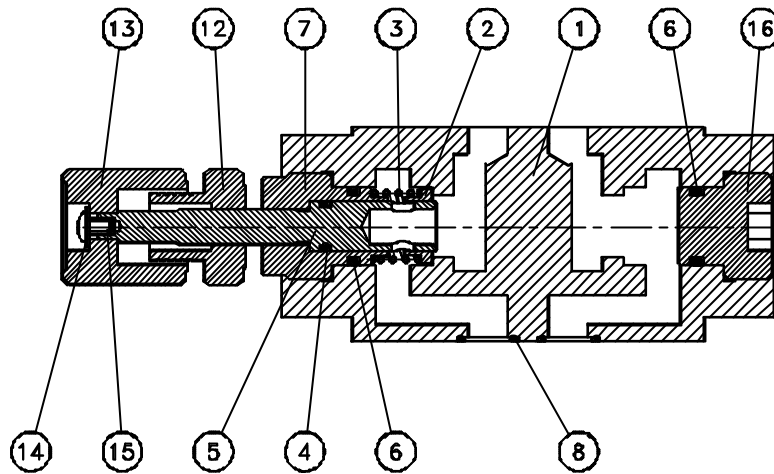
P T B A
MT-03W-I

HOW TO ORDER



SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	70 LPM (20 GPM)



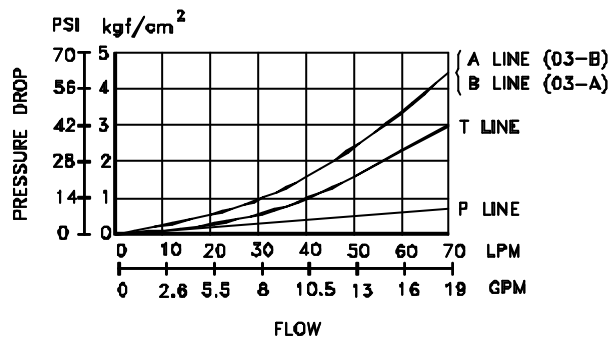
NO.	DESCRIPTION	SPEC.	NO.	DESCRIPTION	SPEC.
4	O-RING	P10(70°)	8	O-RING	AS568-014(90°)
6	O-RING	P16(70°)			

PERFORMANCE CURVES

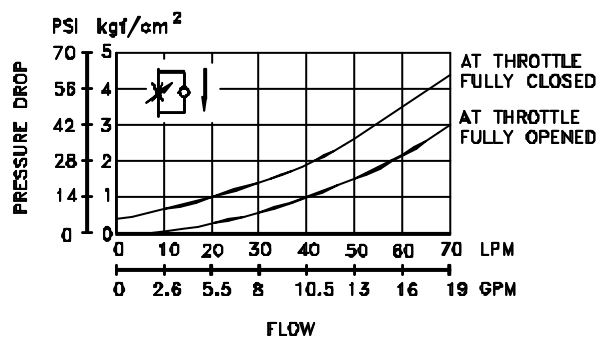
TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

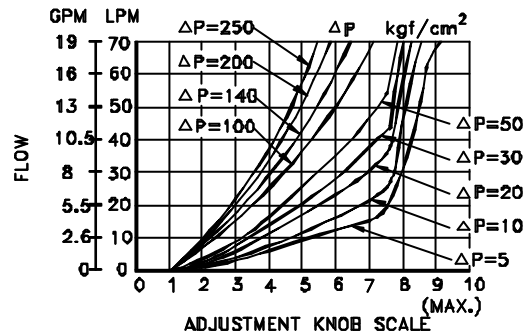
PRESSURE DROP



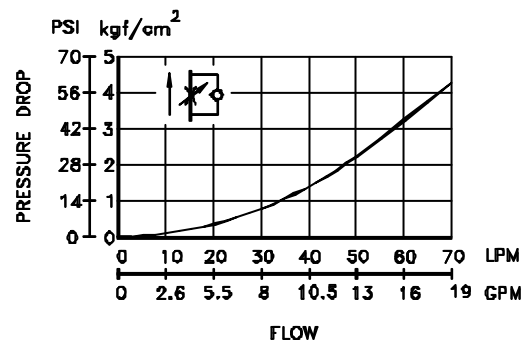
PRESSURE DROP
FOR FREE FLOW



METERED FLOW
VS. DIAL POSITION



PRESSURE DROP AT
THROTTLE FULLY OPENED

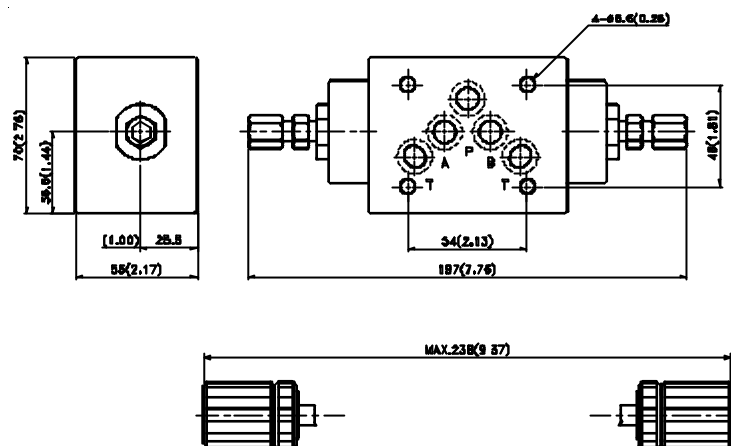


INSTALLATION DIMENSIONS

MT - 03W - * - * - 30

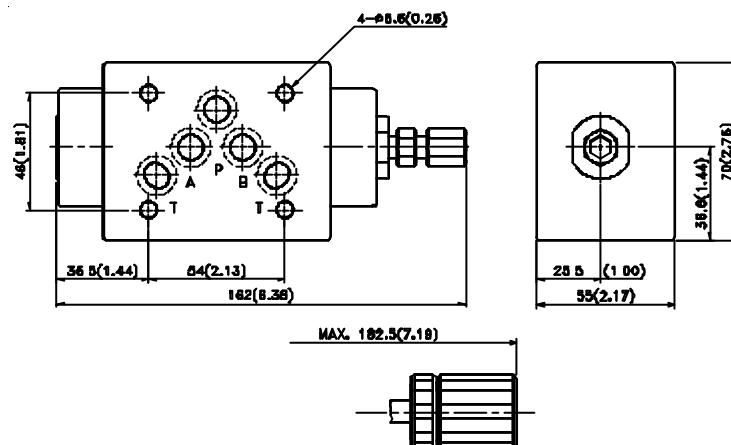
UNIT: mm(inch)

WEIGHT: 2.8kgs(6.171lbs)



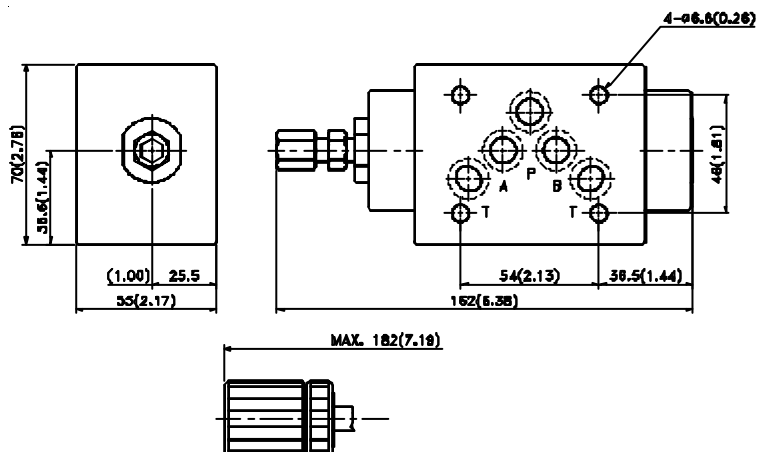
MT - 03B - * - * - 30

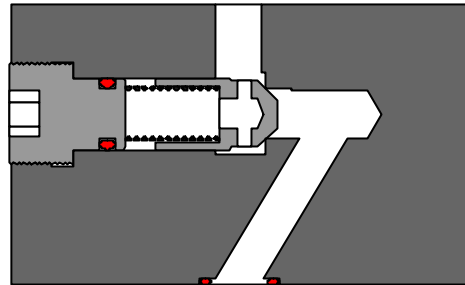
WEIGHT: 2.4kgs(5.29lbs)



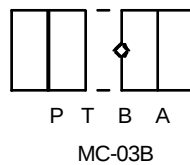
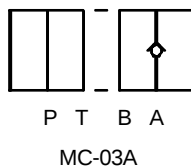
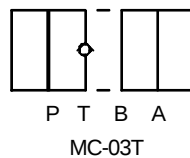
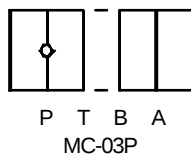
MT - 03A - * - * - 30

WEIGHT: 2.4kgs(5.29lbs)



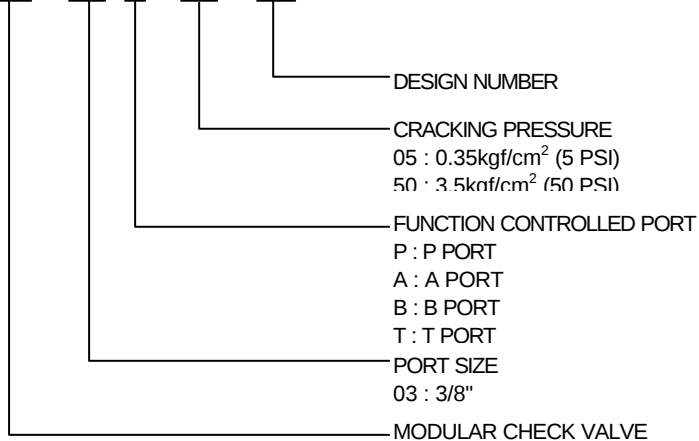


SYMBOLS



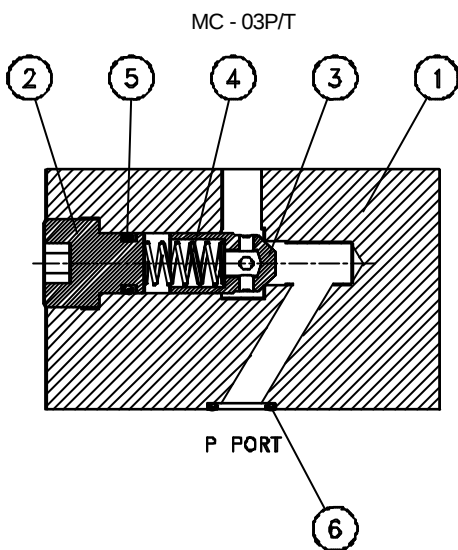
HOW TO ORDER

MC - 03 P - 50 - 30

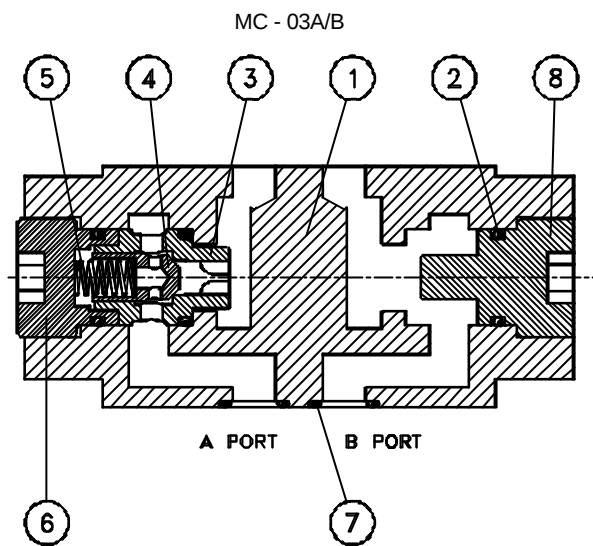


SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	70 LPM (18.5 GPM)



NO.	DESCRIPTION	SPEC.
5	O-RING	P10(90°)
6	O-RING	AS568-014(90°)

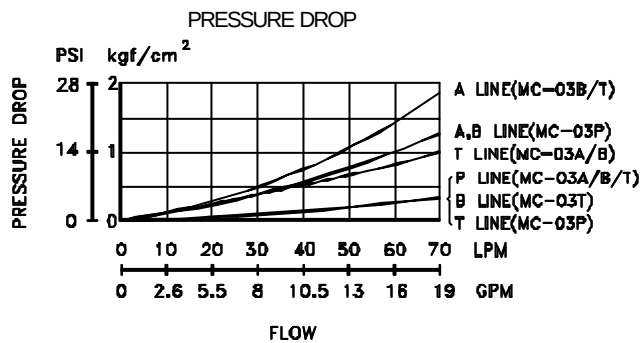
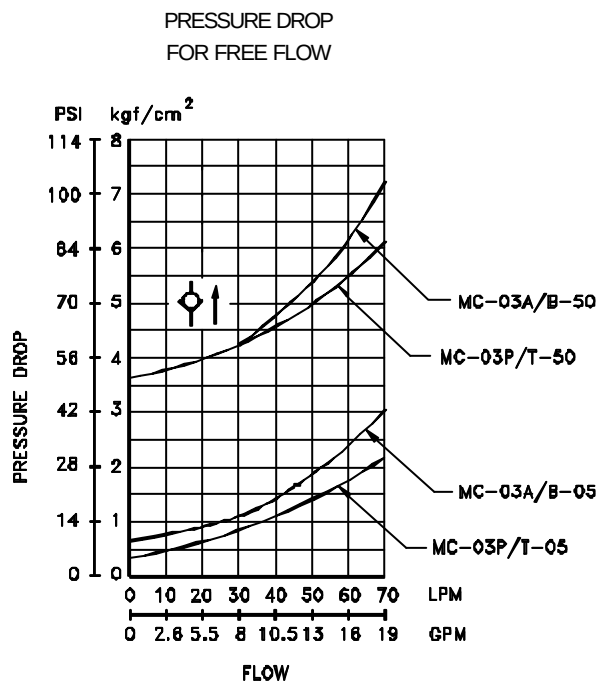


NO.	DESCRIPTION	SPEC.
2	O-RING	P18(90°)
7	O-RING	AS568-014(90°)

PERFORMANCE CURVE

TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

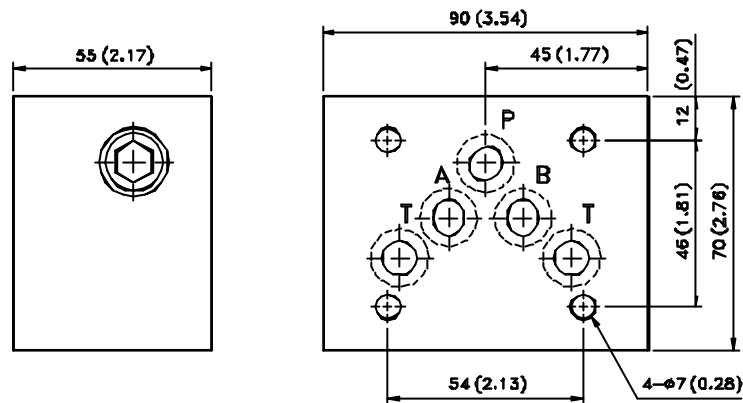


INSTALLATION DIMENSIONS

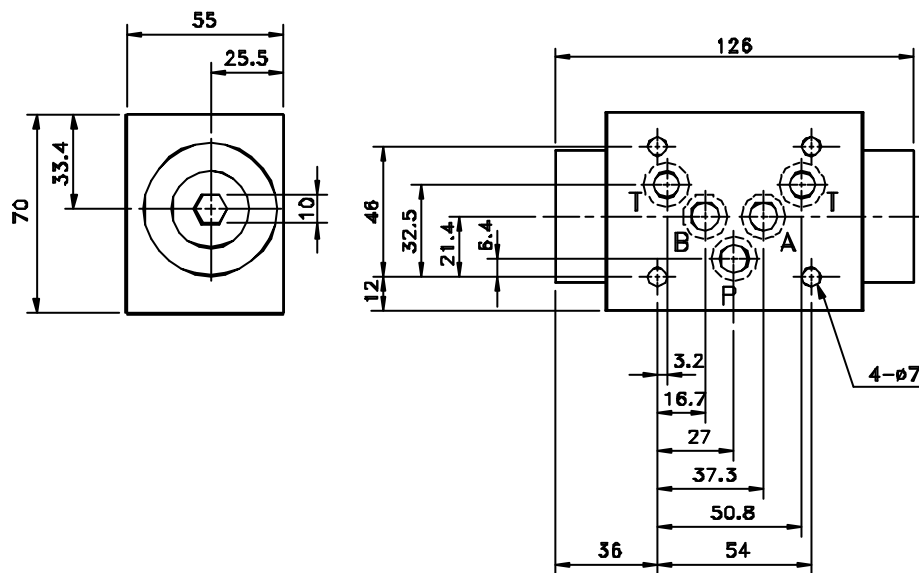
MC - 03P/T - ** - 30

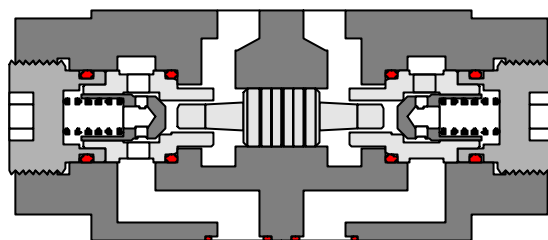
UNIT: mm/(inch)

WEIGHT: 2.3kgs(5.07lbs)



MC - 03A/B - ** - 30

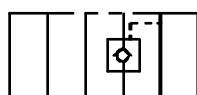




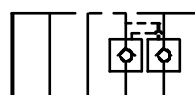
SYMBOLS



P T B A
MPC-03A



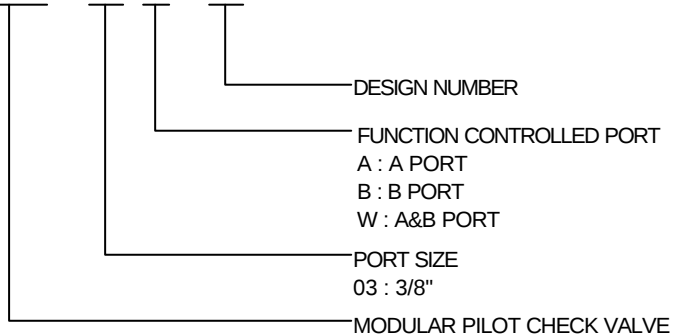
P T B A
MPC-03B



P T B A
MPC-03W

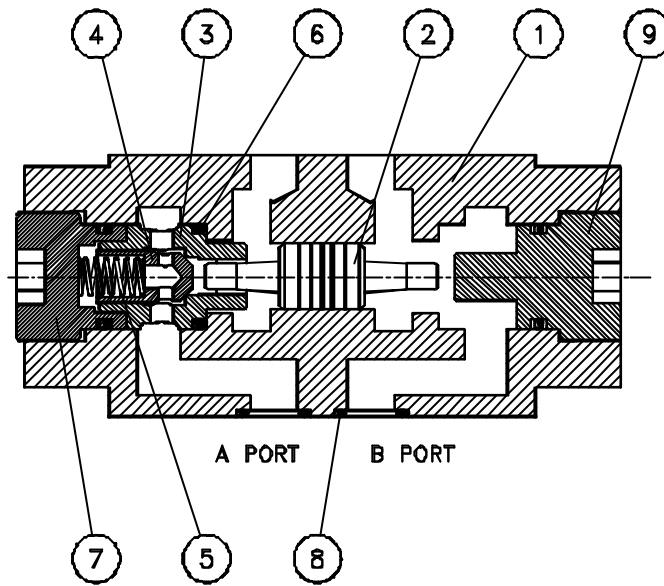
HOW TO ORDER

MPC - 03 W - 30



SPECIFICATIONS

MAX. OPERATING PRESSURE	210 kgf/cm ² (3000 PSI)
MAX. FLOW CAPACITY	70 LPM (18.5 GPM)
CRACKING PRESSURE IN FREE FLOW	4 kgf/cm ² (57 PSI)
PILOT RATIO	1 : 3



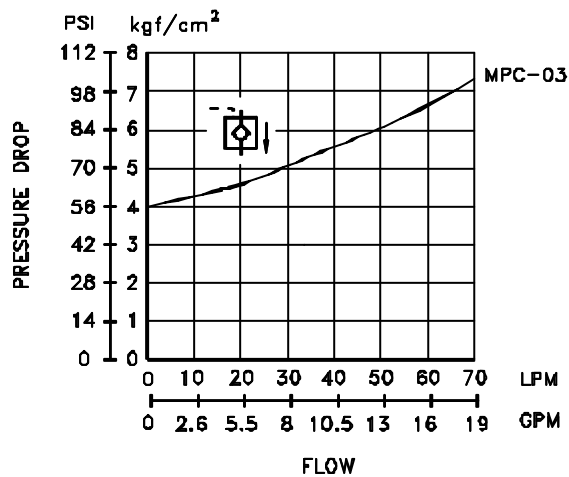
NO.	DESCRIPTION	SPEC.
6	O-RING	P18(90°)
8	O-RING	AS568-014(90°)

PERFORMANCE CURVES

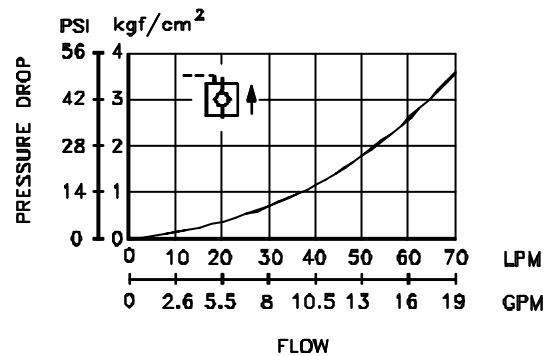
TEST FLUID VISCOSITY : 35 cSt (175 SSU)

TEST TEMPERATURE : 50°C (122°F)

PRESSURE DROP
FOR FREE FLOW



PRESSURE DROP FOR
REVERSED CONTROLLED FLOW



MPC - 03* - 30

UINT: mm/(inch)

WEIGHT:2.7kgs(5.95lbs)

