

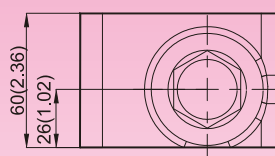
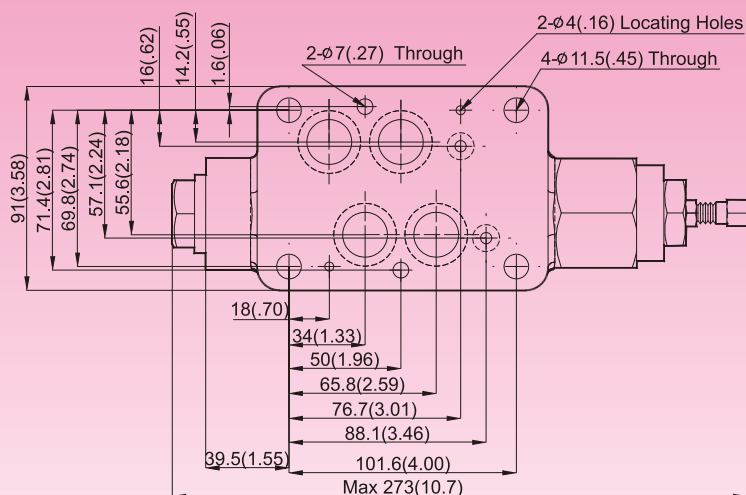
DIMENSIONS

MILLIMETERS(INCHES)

MB*-04

Relief Valves(Modular Type)

MOUNTING SURFACE:MB*-04-CETOP7
ISO 07-NFPAD07



MBA-04

MBB-04

MBP-04

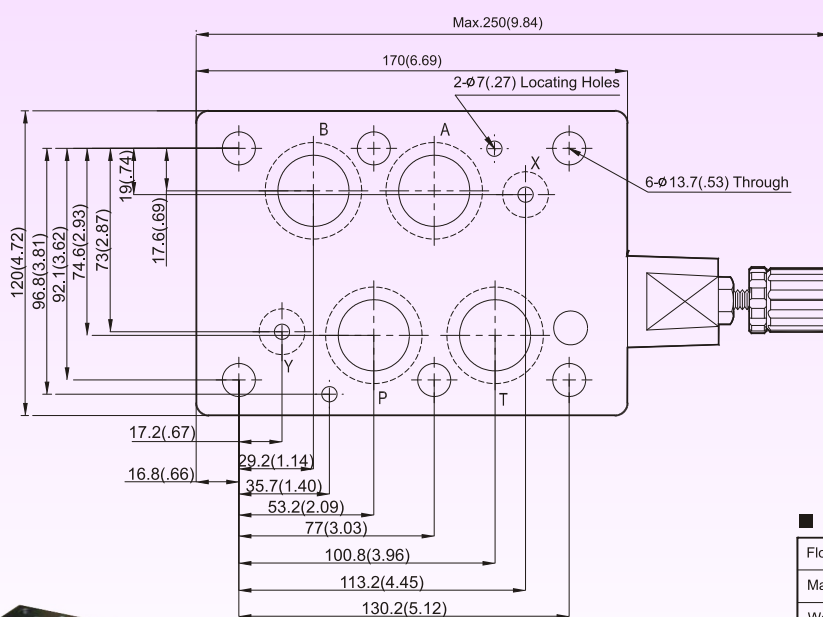
Valve Specifications & Attachment

Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring P9 x 2 pc & P22A x 4 pcs	

MB*-06

Relief Valves(Modular Type)

MOUNTING SURFACE:MB*-06-CETOP8
ISO 08-NFPAD08



MBA-06

MBB-06

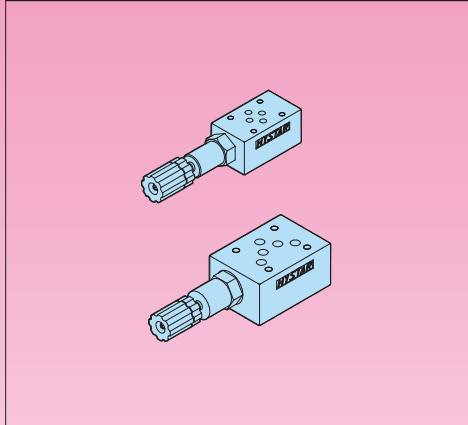
MBP-06

Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring P12 x 2 pc, P28 x 4 pcs	

REDUCING MODULAR VALVES

■ Reducing Valves(Modular Type)



Model & Symbol	Model & Symbol
MRP-01 (03)	MRP-04 (06)
MRA-01 (03)	MRA-04 (06)
MRB-01 (03)	MRB-04 (06)

■ Ratings

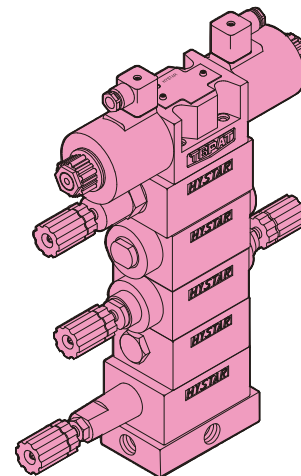
Model	Max Operating Pres bar (PSI)	Max Flow lpm (USgpm)	Valve Size	Weight kg (lb)
MR* -01-*	250 (3600)	50 (13.2)	1/8"	1.1 (2.4)
MR* -03-*	250 (3600)	100 (26.5)	3/8"	3.8 (8.3)
MR* -04-*	250 (3600)	190 (50.2)	1/2"	7.0 (15.4)
MR* -06-*	250 (3600)	300 (79.3)	3/4"	11.2 (24.6)

- This valve is employed to keep the pressure of some circuit lower than the main circuit pressure.
- Drain port should be connected to tank.
- Pressure difference between primary pressure and secondary pressure should be maintained over than 10 bar for good pressure reduction.
- Pressure cannot be adjusted if a certain flow rate cannot be obtained.
- The pressure will be increased when the pressure adjustment handle is turned clockwise, and will be reduced when the pressure adjustment handle is turned counter-clockwise.
- Be sure to re-tighten the lock nut firmly after making adjustment to the pressure.

■ Ordering Code

MR - P - 03 - C - 20 - S

Series No	Control Line	Valve Size	Pressure Adj. Range	Design No	Option Kits
Reducing Modular Valves	P : P Port 	(DSG-) 01 (NFPA-D03) 	B: 3~ 70 bar 	20 DIN 912 bolts 	None: With Knob
	A : A Port 	(DSG-) 03 (NFPA-D05) 	C: 35~ 140 bar 	2090 UNC bolts (North America) 	S: Soc. Hd. Cap Screw
	B : B Port 	(DSHG-) 04 (NFPA-D07) 	H: 70~ 210 bar 		
		(DSHG-) 06 (NFPA-D08) 			



MILLIMETERS(INCHES)

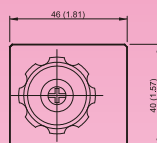
Reducing Valves(Modular Type)

■ Valve Specifications & Attachment

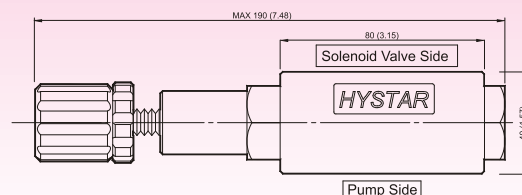
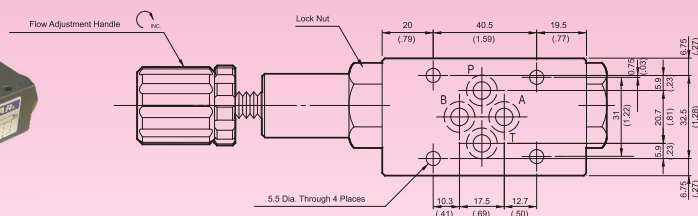
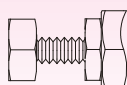
		
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SYMBOL



OPTION
Design No: 30 (3090)



Reducing Valves(Modular Type)

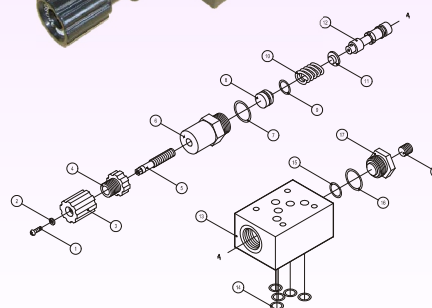
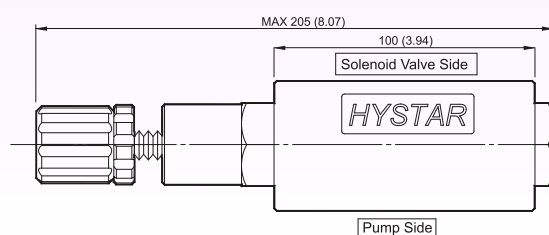
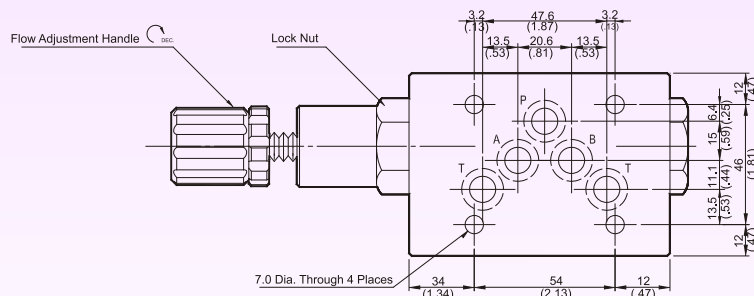
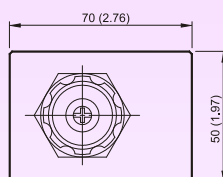
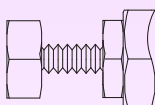
■ Valve Specifications & Attachment

			
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SYMBOL

OPTION
Design No: 30 (3090)



DIMENSIONS

MILLIMETERS(INCHES)

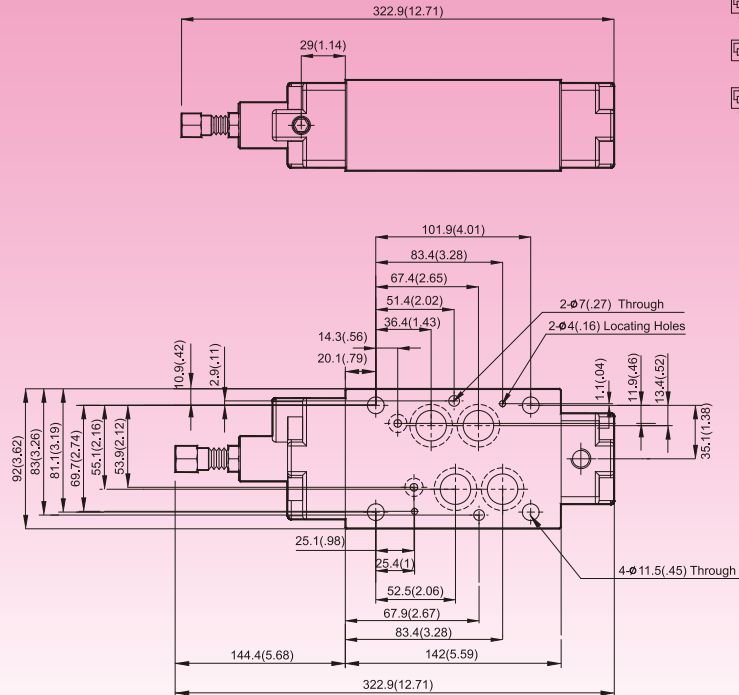
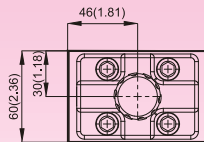
MR*-04

Reducing Valves(Modular Type)

MOUNTING SURFACE:MR*-04-CETOP7
ISO 07-NFPAD07

Valve Specifications & Attachment

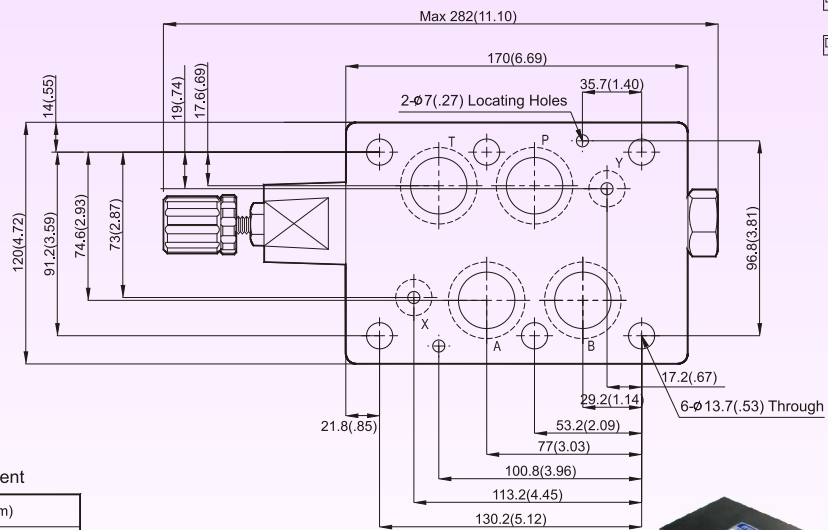
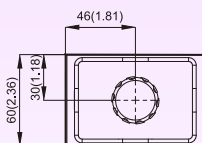
Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring P9 x 2 pc & P22A x 4 pcs	



SYMBOL

MR*-06

Reducing Valves(Modular Type)

MOUNTING SURFACE:MR*-06-CETOP8
ISO 08-NFPAD08


SYMBOL

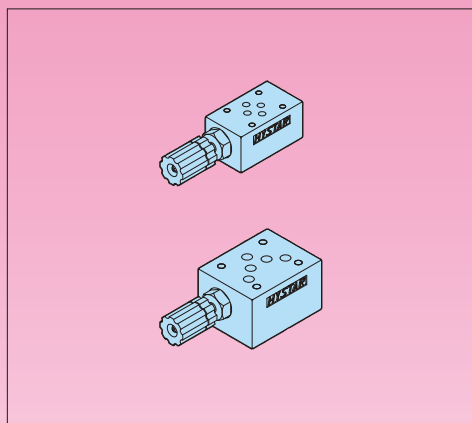
Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring P12 x 2 pc, P28 x 4 pcs	

MRA-06
MRB-06
MRP-06


THROTTLE MODULAR VALVES

Throttle Valves(Modular Type)



Model & Symbol		Model & Symbol	
MSP-01 (03)		MSP-04 (06)	

Ratings

Model	Max Operating Pres bar (PSI)	Max Flow lpm (USgpm)	Valve Size	Weight kg (lb)
MSP-01	250 (3600)	50 (13.2)	1/8"	1.2 (2.6)
MSP-03	250 (3600)	100 (26.5)	3/8"	2.8 (6.1)
MSP-04	250 (3600)	190 (50.2)	1/2"	7.0 (15.4)
MSP-06	250 (3600)	300 (79.3)	3/4"	11.2 (24.6)

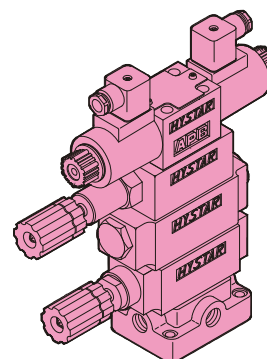
- The flow will be decreased when the flow adjustment handle is turned clockwise, and will be increased when the flow adjustment handle is turned counter-clockwise.
- Be sure to re-tighten the lock nut firmly after making adjustment to the flow.



Ordering Code

MS - P - 01 - H - 20 - S

Series No	Control Line	Valve Size	Pressure Adj. Range	Design No	Option Kits
Throttle Modular Valves (for P-Port)	P : P Port 	(DSG-) 01 (NFPA-D03) 	L: 5~ 50 bar 	20 DIN 912 bolts 	None: With Knob DSG-01/03
		(DSG-) 03 (NFPA-D05) 	H: 70~ 210 bar 	2090 UNC bolts (North America) 	S: Soc. Hd. Cap Screw
		(DSHG-) 04 (NFPA-D07) 			
		(DSHG-) 06 (NFPA-D08) 			



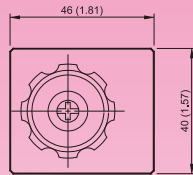
DIMENSIONS

MILLIMETERS(INCHES)

MSP-01

Throttle Valves(Modular Type)

MOUNTING SURFACE:MS*-01-CETOP3
ISO 03-NFPAD03

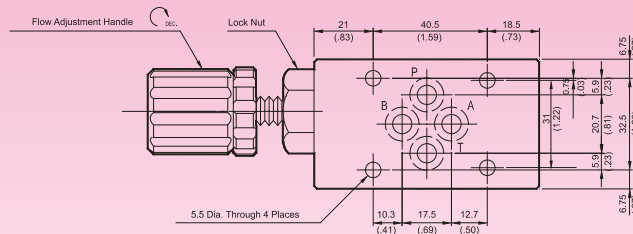


Valve Specifications & Attachment

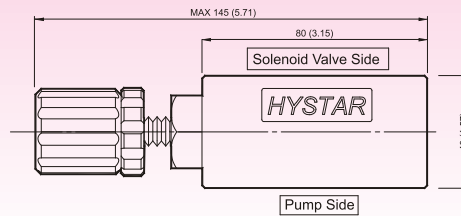
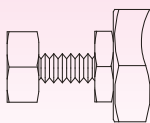
Flow Rating	50 lpm (13.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	1.2 (2.6)
CODE:20	M5 X85LgX4pcs
CODE:2090	10-24UNCX3-1/4"LgX4pcs
Mounting Surface O-Ring P9 x 4 pc	



SYMBOL



OPTION
Design No: 30 (3090)

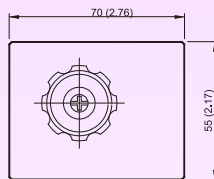
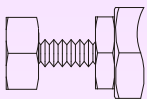


MSP-03

Throttle Valves(Modular Type)

MOUNTING SURFACE:MS*-03-CETOP5
ISO 05-NFPAD05

OPTION
Design No: 30 (3090)

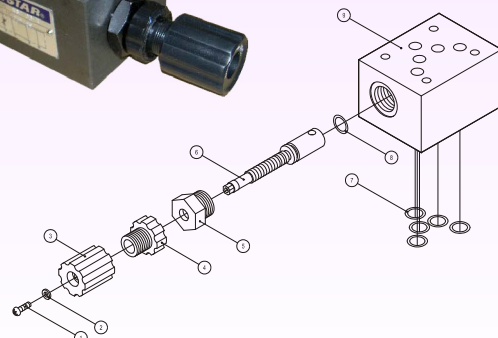
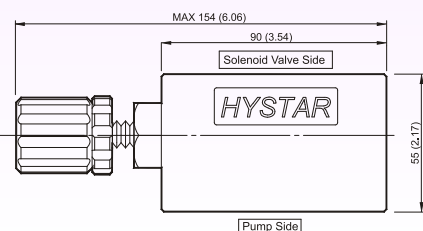
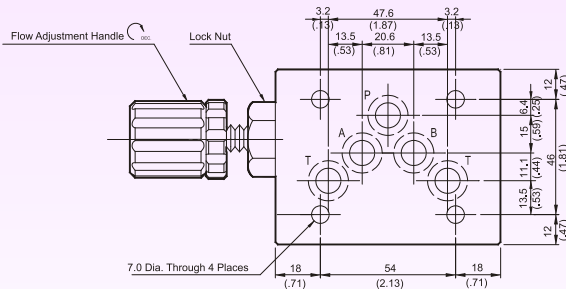


Valve Specifications & Attachment

Flow Rating	100 lpm (26.5 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	3.0 (6.6)
CODE:20	M6 X90LgX4pcs
CODE:2090	1/4-20UNCX3-1/2LgX4pcs
Mounting Surface O-Ring P12 x 5 pc	



SYMBOL



DIMENSIONS

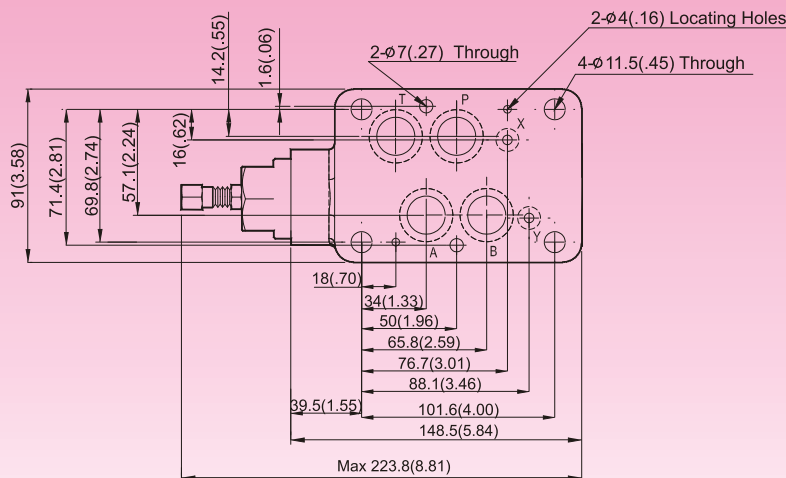
MILLIMETERS(INCHES)

MSP-04 Throttle Valves(Modular Type)

MOUNTING SURFACE:MSP-04-CETOP7
ISO 07-NFPAD07



SYMBOL



Valve Specifications & Attachment

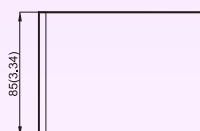
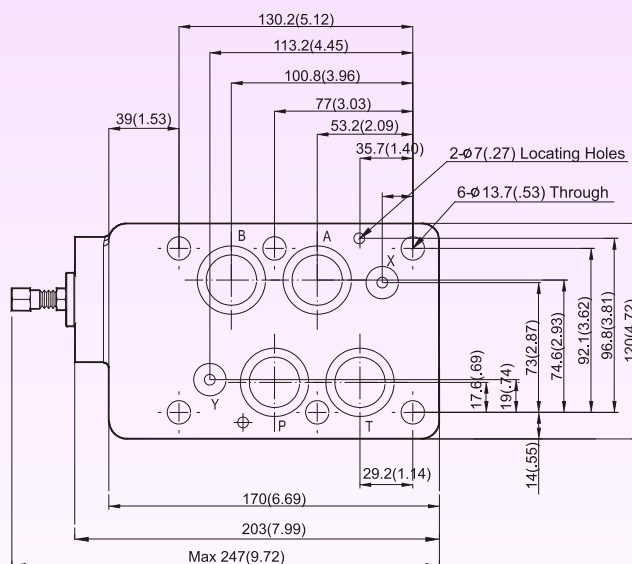
Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring	P9 x 2 pc & P22A x 4 pcs

MSP-06 Throttle Valves(Modular Type)

MOUNTING SURFACE:MSP-06-CETOP8
ISO 08-NFPAD08



SYMBOL

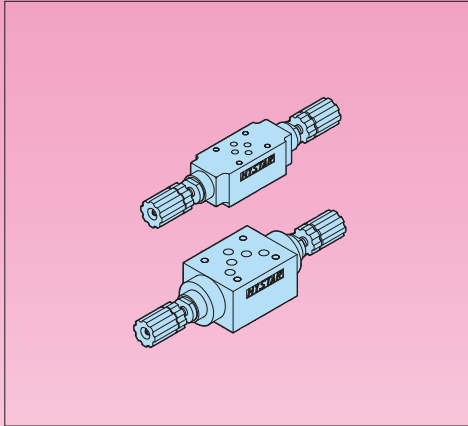


Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring	P12 x 2 pc, P28 x 4 pcs

THROTTLE WITH CHECK MODULAR VALVES

Throttle with Check Valves(Modular Type)



Ratings

Model	Max Operating Pres bar (PSI)	Max Flow lpm (USgpm)	Valve Size	Weight kg (lb)
MS*-01-*	250 (3600)	50 (13.2)	1/8"	1.5 (3.3)
MS*-03-*	250 (3600)	100 (26.5)	3/8"	3.7 (8.1)
MS*-04-*	250 (3600)	190 (50.2)	1/2"	7.0 (15.4)
MS*-06-*	250 (3600)	300 (79.3)	3/4"	12.2 (26.8)

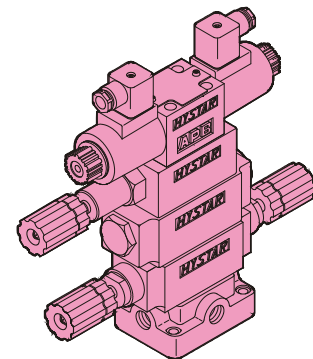
Ordering Code

MS **A** - **03** - **X** - **L** - **20** - **S**

Series No	Control Line	Valve Size	Pressure Adj. Range	Pressure Adj. Range	Design No	Option Kits
Throttle Check Modular Valves	A : A Port 	(DSG-) 01 (NFPA-D03) 	X : Meter out	L: 5~ 50 bar 	20 DIN 912 bolts 	None: With Knob
	B : B Port 	(DSG-) 03 (NFPA-D05) 		H: 50~ 250 bar 	2090 UNC bolts (North America) 	S: Soc. Hd. Cap Screw
	W : A & B Port 	(DSHG-) 04 (NFPA-D07) 				
		(DSHG-) 06 (NFPA-D08) 				

Model & Symbol	Model & Symbol
MSA-01 (03)-X	MSA-04 (06)-X
MSB-01 (03)-X	MSB-04 (06)-X
MSW-01 (03)-X	MSW-04 (06)-X
MSA-01 (03)-Y	MSA-04 (06)-Y
MSB-01 (03)-Y	MSB-04 (06)-Y
MSW-01 (03)-Y	MSW-04 (06)-Y

- This valve is used for actuator speed control.
- Clockwise rotation of the adjusting handle decreases flow rate and counter-clockwise rotation increases it.
- Since the valve is of the spool type, oil flow cannot be shut off completely.
- Cracking pressure of check valve is 0.8 bar.



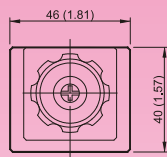
DIMENSIONS

MILLIMETERS(INCHES)

MSW-01

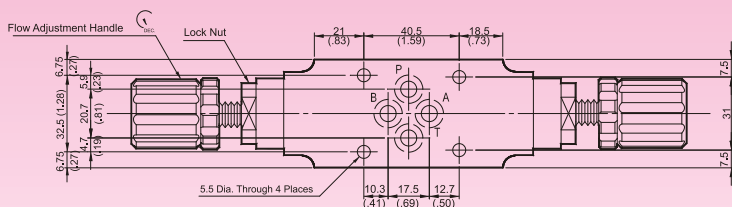
Throttle with Check Valves(Modular Type)

MOUNTING SURFACE:MS*-01-CETOP3
ISO 03-NFPAD03

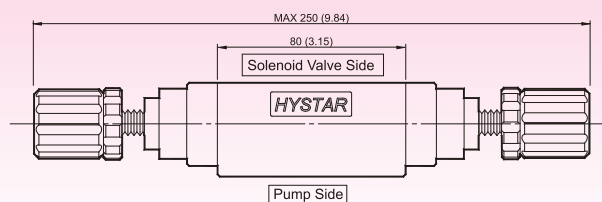
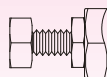


Valve Specifications & Attachment

Flow Rating	50 lpm (13.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	1.5 (3.3)
CODE:20	M5 X85LgX4pcs
CODE:2090	10-24UNCX3-1/4"LgX4pcs
Mounting Surface O-Ring	P9 x 4 pc



OPTION
Design No: 30 (3090)



SYMBOL

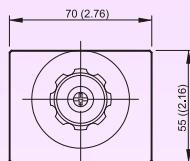
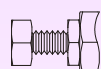


MSW-03

Throttle with Check Valves(Modular Type)

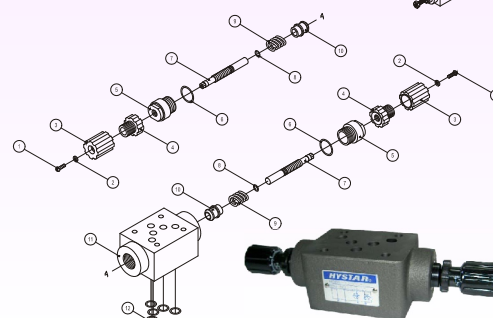
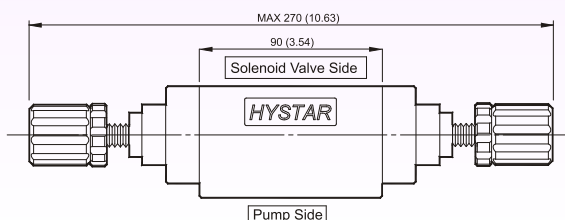
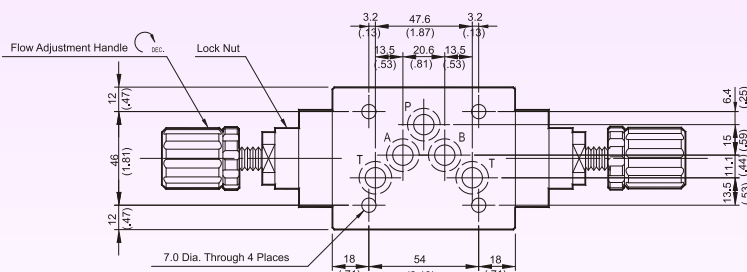
MOUNTING SURFACE:MS*-03-CETOP5
ISO 05-NFPAD05

OPTION
Design No: 30 (3090)



Valve Specifications & Attachment

Flow Rating	100 lpm (26.5 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	3.7 (8.2)
CODE:20	M6 X90LgX4pcs
CODE:2090	1/4-20UNCX3-1/2LgX4pcs
Mounting Surface O-Ring	P12 x 5 pc



SYMBOL





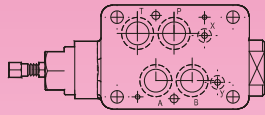
MODULAR CONTROL VALVES

DIMENSIONS

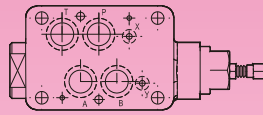
MILLIMETERS(INCHES)

MS*-04 Throttle with Check Valves(Modular Type)

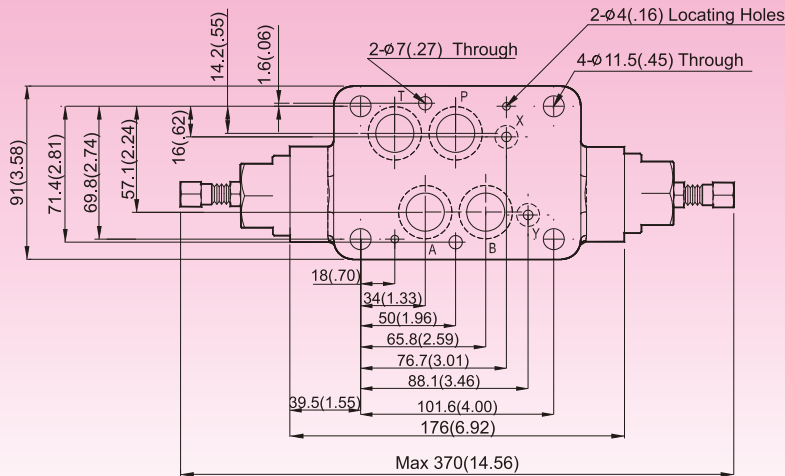
MOUNTING SURFACE:MS*-04-CETOP7
ISO 07-NFPAD07



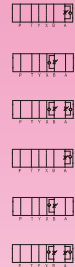
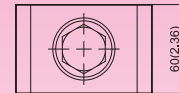
MSB-04



MSA-04



MSW-04



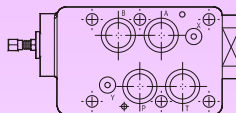
SYMBOL

Valve Specifications & Attachment

Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring P9 x 2 pc & P22A x 4 pcs	

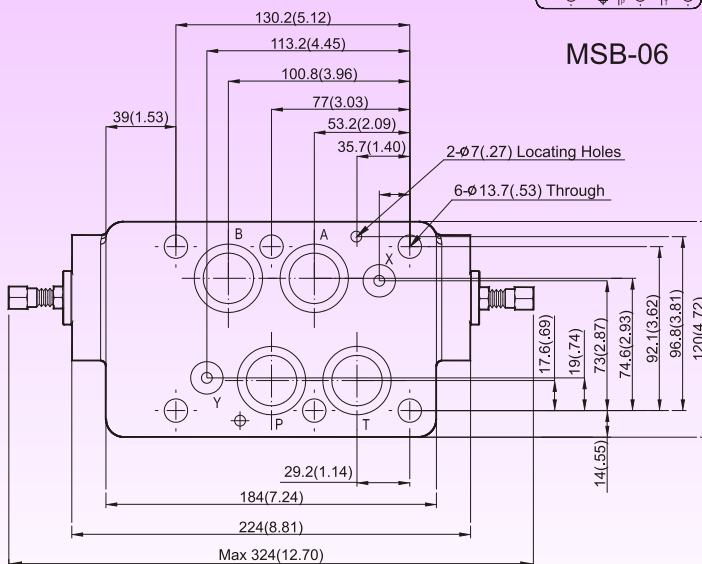
MS*-06 Throttle with Check Valves(Modular Type)

MOUNTING SURFACE:MS*-06-CETOP8
ISO 08-NFPAD08

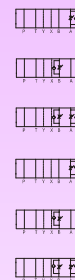
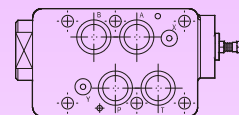


MSB-06

MSA-06



MSW-06



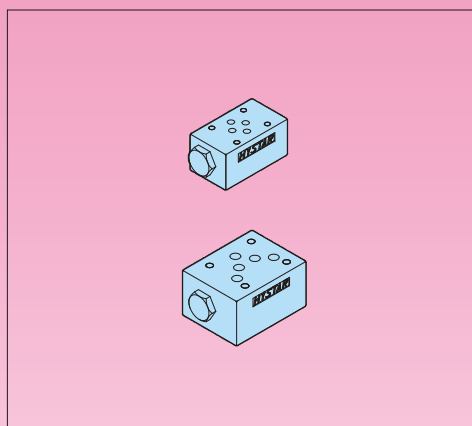
SYMBOL

Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring P12 x 2 pc, P28 x 4 pcs	

CHECK MODULAR VALVES

■ Check Valves(Modular Type)



Model & Symbol	Model & Symbol
MCP-01 (03)	MCP-04 (06)
MCA-01 (03)	MCA-04 (06)
MCB-01 (03)	MCB-04 (06)
MCT-01 (03)	MCT-04 (06)

■ Ratings

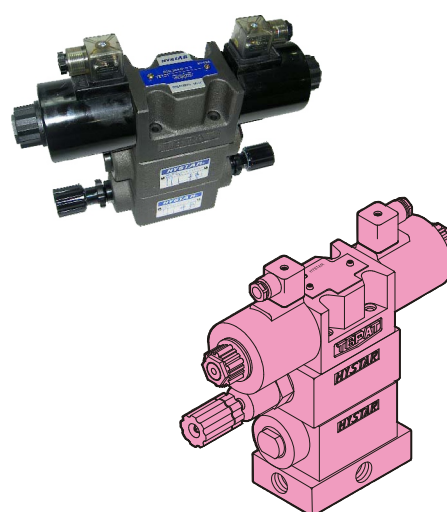
Model	Max Operating Pres bar (PSI)	Max Flow lpm (USgpm)	Valve Size	Weight kg (lb)
MC*-01-*	250 (3600)	50 (13.2)	1/8"	1.1 (2.4)
MC*-03-*	250 (3600)	100 (26.5)	3/8"	2.8 (6.1)
MC*-04-*	250 (3600)	190 (50.2)	1/2"	7.0 (15.4)
MC*-06-*	250 (3600)	300 (79.3)	3/4"	11.0 (24.2)

- This Valve is of the modular design improved from the check valve fitted in the P port or T port to prevent the oil from flowing in the reverse direction.
- With a valve of size 01, 03, 04, 06 the check valve is incorporated between A, B port and T port. This check modular valve of a certain type can be used for suction.

■ Ordering Code

MC - P - 03 - 2 - 20

Series No	Control Line	Valve Size	Cracking Pressure	Design No
Check Modular Valves	P : P Port 	(DSG-) 01 (NFPA-D03) 	0: 0.35 bar 	20 DIN 912 bolts
	A : A Port 	(DSG-) 03 (NFPA-D05) 	2: 2 bar 	2090 UNC bolts (North America)
	B : B Port 	(DSHG-) 04 (NFPA-D07) 	4: 4 bar 	
	T : T Port 	(DSHG-) 06 (NFPA-D08) 		





MODULAR CONTROL VALVES

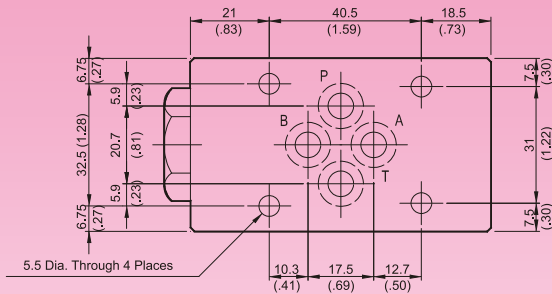
DIMENSIONS

MILLIMETERS(INCHES)

MC*-01

Check Valves(Modular Type)

MOUNTING SURFACE:MC*-01-CETOP3
ISO 03-NFPAD03

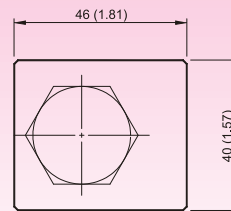
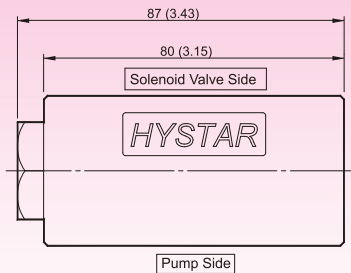


Valve Specifications & Attachment

Flow Rating	50 lpm (13.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg.(lbs.)	1.1 (2.4)
CODE:20	M5 X85LgX4pcs
CODE:2090	10-24UNCX3-1/4"LgX4pcs
Mounting Surface O-Ring P9 x 4 pc	



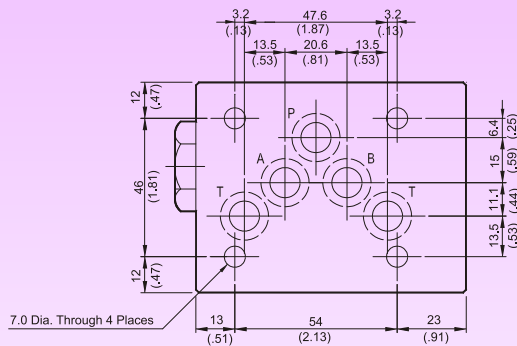
SYMBOL



MC*-03

Check Valves(Modular Type)

MOUNTING SURFACE:MC*-03-CETOP5
ISO 05-NFPAD05

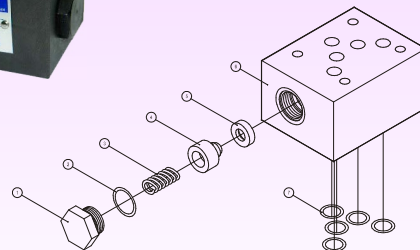
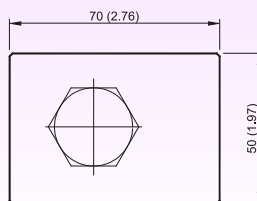
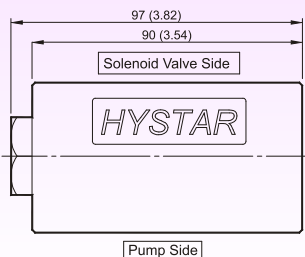


Valve Specifications & Attachment

Flow Rating	100 lpm (26.5 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg.(lbs.)	3.5 (7.7)
CODE:20	M6 X90LgX4pcs
CODE:2090	1/4-20UNCX3-1/2LgX4pcs
Mounting Surface O-Ring P12 x 5 pc	



SYMBOL



DIMENSIONS

MILLIMETERS(INCHES)

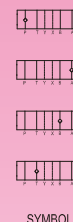
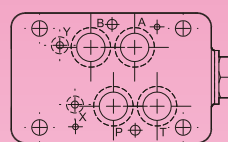
MCP-04 Check Valves(Modular Type)

MOUNTING SURFACE:MC*-04-CETOP7
ISO 07-NFPAD07

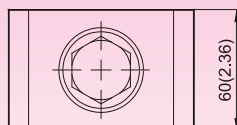
Valve Specifications & Attachment

Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring	P9 x 2 pc & P22A x 4 pcs

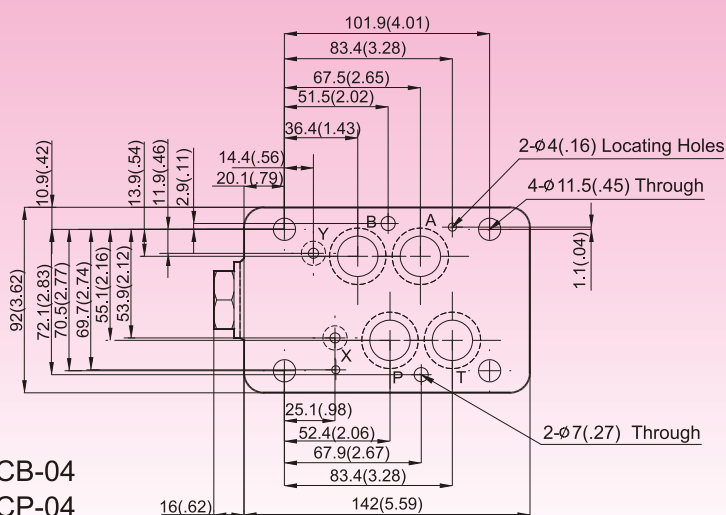
MCA-04
MCT-04



SYMBOL



MCB-04
MCP-04



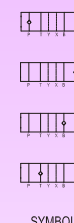
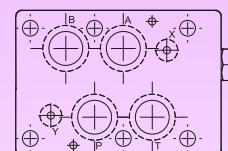
MCP-06 Check Valves(Modular Type)

MOUNTING SURFACE:MC*-06-CETOP8
ISO 08-NFPAD08

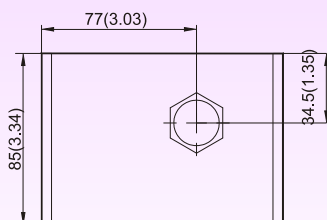
Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring	P12 x 2 pc, P28 x 4 pcs

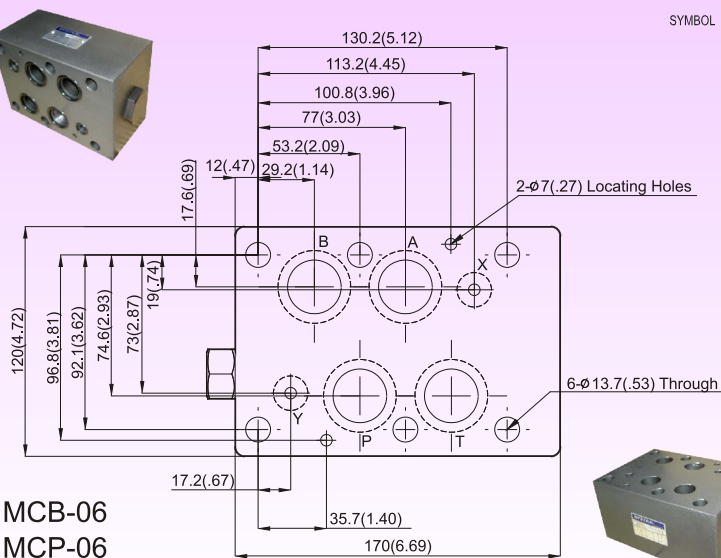
MCA-06
MCT-06



SYMBOL

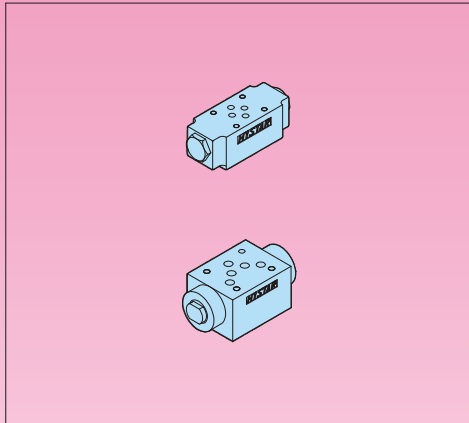


MCB-06
MCP-06



CHECK MODULAR VALVES

Pilot Operated Check Valves(Modular Type)



Model & Symbol	Model & Symbol
MPA-01 (03)	MPA-04 (06)
MPB-01 (03)	MPB-04 (06)
MPW-01 (03)	MPW-04 (06)



Ratings

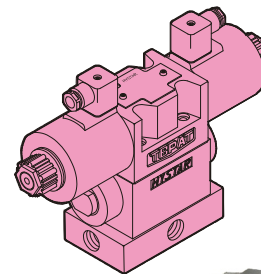
Model	Max Operating Pres bar (PSI)	Max Flow lpm (USgpm)	Valve Size	Weight kg (lb)
MP*-01-*	250 (3600)	50 (13.2)	1/8"	1.2 (2.6)
MP*-03-*	250 (3600)	100 (26.5)	3/8"	3.7 (8.1)
MP*-04-*	250 (3600)	190 (50.2)	1/2"	7.0 (15.4)
MP*-06-*	250 (3600)	300 (79.3)	3/4"	11.2 (24.6)

- This Valve is of the modular design improved from the pilot operated check valve used for preventing the actuator from self-operating, as well as for valve position holding.
- Cracking pressure of check valve is 2 bar.
- The valve is of the internal drain type.

Ordering Code

MP A - 03 - 2 - 20

Series No	Control Line	Valve Size	Cracking Pressure	Design No
Pilot Operated Check Modular Valves	A : A Port 	(DSG-) 01 (NFPA-D03) 	2: 2 bar 	20 DIN 912 bolts
	B : B Port 	(DSG-) 03 (NFPA-D05) 	4: 4 bar 	2090 UNC bolts (North America)
	W : A & B Port 	(DSHG-) 04 (NFPA-D07) 		Design No. 30 Decompression Type
		(DSHG-) 06 (NFPA-D08) 		



MPW-03-30

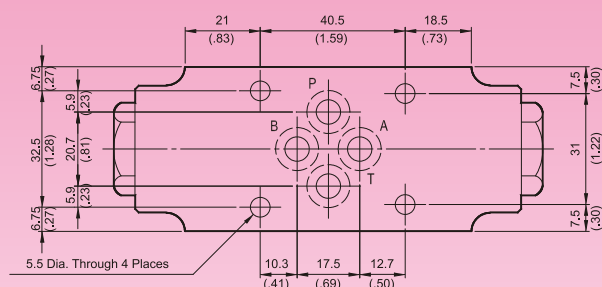
DIMENSIONS

MILLIMETERS(INCHES)

MPW - 01

Pilot Operated Check Valves(Modular Type)

MOUNTING SURFACE:MP*-01-CETOP3
ISO 03-NFPAD03

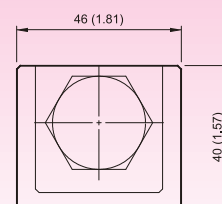
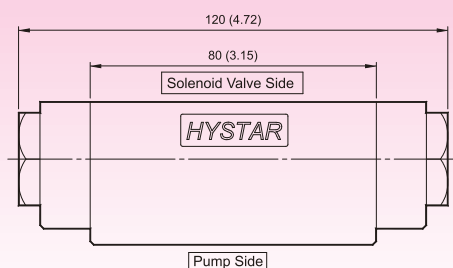


Valve Specifications & Attachment

Flow Rating	50 lpm (13.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	1.2 (2.6)
CODE:20	M5 X85LgX4pcs
CODE:2090	10-24UNCX3-1/4"LgX4pcs
Mounting Surface O-Ring P9 x 4 pc	



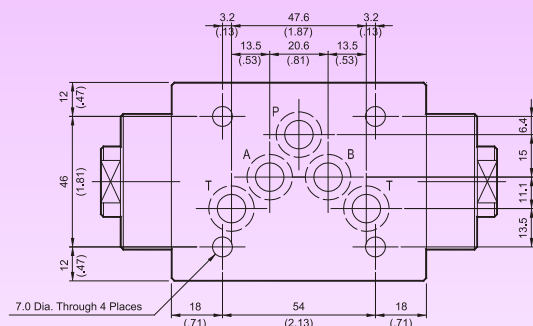
SYMBOL



MPW - 03

Pilot Operated Check Valves(Modular Type)

MOUNTING SURFACE:MP*-03-CETOP5
ISO 05-NFPAD05

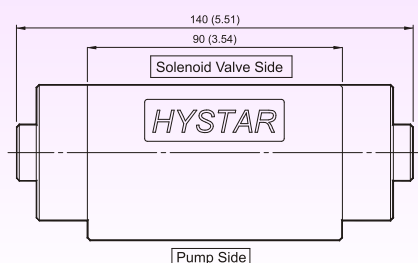


Valve Specifications & Attachment

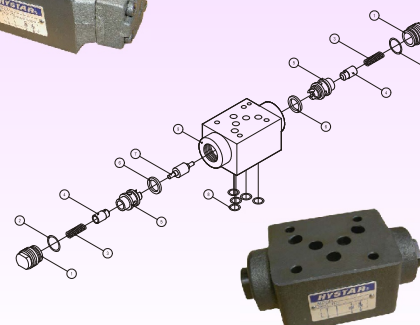
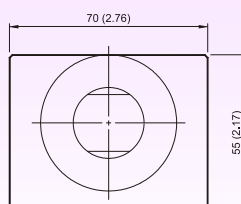
Flow Rating	100 lpm (26.5 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	3.5 (7.7)
CODE:20	M6 X90LgX4pcs
CODE:2090	1/4-20UNCX3-1/2LgX4pcs
Mounting Surface O-Ring P12 x 5 pc	



SYMBOL



MPW-03-30





MODULAR CONTROL VALVES

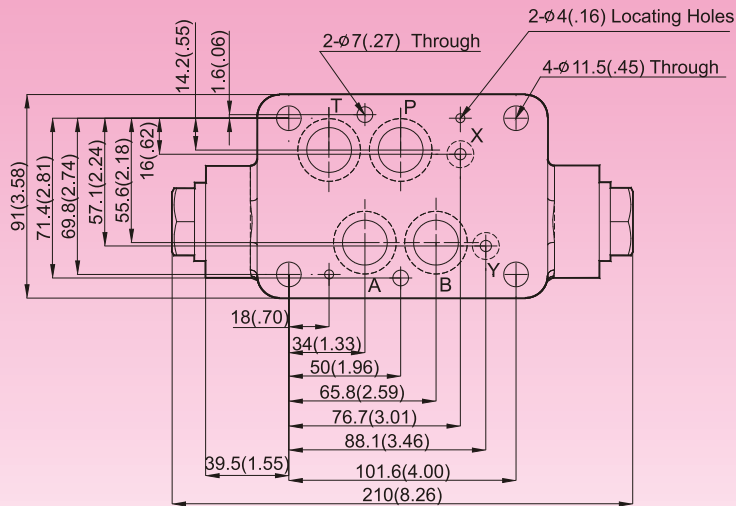
DIMENSIONS

MILLIMETERS(INCHES)

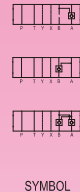
MPW - 04

Pilot Operated Check Valves(Modular Type)

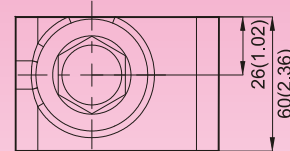
MOUNTING SURFACE:MP*-04-CETOP7
ISO 07-NFPAD07



MPA-04
MPB-04
MPW-04



SYMBOL



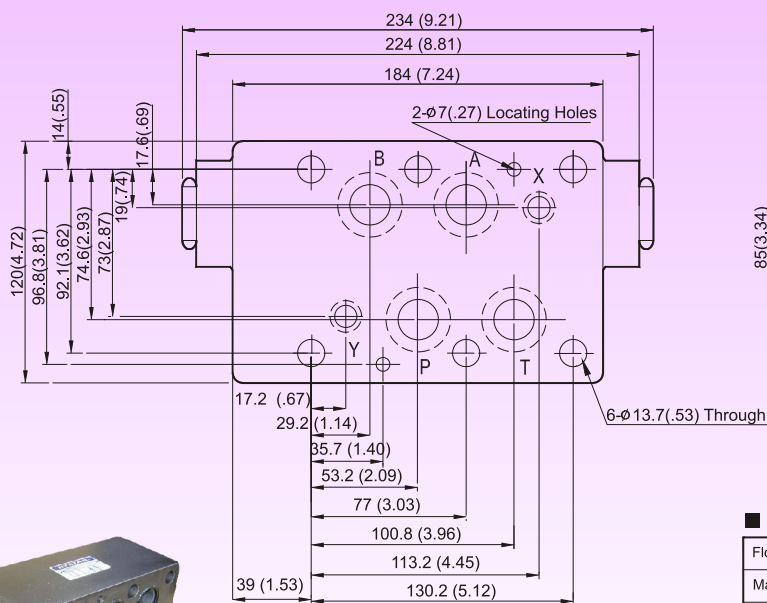
Valve Specifications & Attachment

Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring P9 x 2 pc & P22A x 4 pcs	

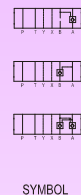
MPW - 06

Pilot Operated Check Valves(Modular Type)

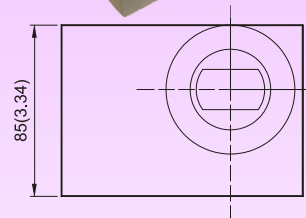
MOUNTING SURFACE:MP*-06-CETOP8
ISO 08-NFPAD08



MPA-06
MPB-06
MPW-06



SYMBOL

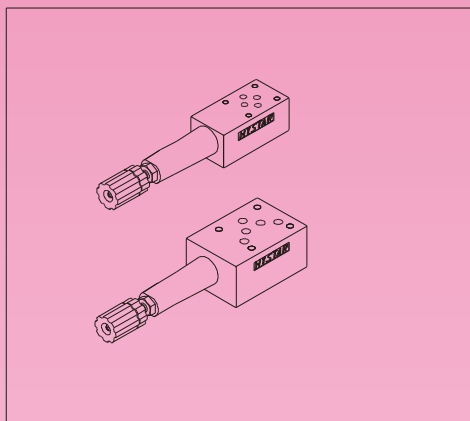


Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring P12 x 2 pc, P28 x 4 pcs	

SEQUENCE VALVES & COUNTER BALANCE MODULAR VALVES

- Sequence Valves (Modular Type) - MHP-0*-*
- Counter-balance Valves (Modular Type) - MHA(B)-0*-*



Model & Symbol	Model & Symbol
MHP-01 (03)	MHP-04 (06)
MHA-01 (03)	MHA-04 (06)
MHB-01 (03)	MHB-04 (06)



■ Ratings

Model	Max Operating Pres bar (PSI)	Max Flow lpm (USgpm)	Valve Size	Weight kg (lb)
MH*-01-*	250 (3600)	50 (13.2)	1/8"	1.1 (2.4)
MH*-03-*	250 (3600)	100 (26.5)	3/8"	3.8 (8.3)
MH*-04-*	250 (3600)	190 (50.2)	1/2"	7.0 (15.4)
MH*-06-*	250 (3600)	300 (79.3)	3/4"	11.2 (24.6)

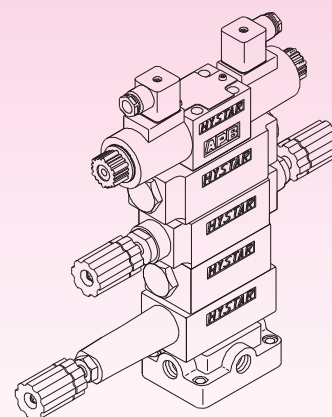
• This sequence modular valves (MHP-0*-*) is used for actuator sequential operation, as well as for circuit pressure holding. With wide adjustment range 6 ~ 250 bar.

• MHA(B)-0*-* counter-balance modular valves is used for actuator back pressure control.

■ Ordering Code

MH - P - 01 - C - 20 - S

Series No	Control Line	Valve Size	Pressure Adj. Range	Design No	Special Kits
MHP Sequence Modular Valves	P : P Port 	(DSG-) 01 (NFPA-D03) 	N: 6~ 18 bar 	20 DIN 912 bolts 	None: With Knob
MHA(B) Counterbalance Modular Valves	A : A Port 	(DSG-) 03 (NFPA-D05) 	A: 18~ 35 bar 	2090 UNC bolts (North America) 	S: Soc. Hd. Cap Screw
	B : B Port 	(DSHG-) 04 (NFPA-D07) 	B: 35~ 70 bar 		
		(DSHG-) 06 (NFPA-D08) 	C: 70~ 250 bar 		



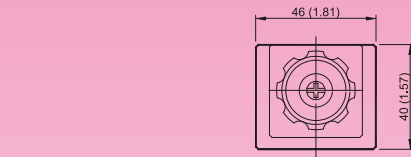
DIMENSIONS

MILLIMETERS(INCHES)

MHB-01

Counterbalance Valves(Modular Type)

MOUNTING SURFACE:MH*-01-CETOP3
ISO 03-NFPAD03



Valve Specifications & Attachment

Flow Rating	50 lpm (13.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	1.1 (2.4)
CODE:20	M5 X85LgX4pcs
CODE:2090	10-24UNCX3-4/4"LgX4pcs
Mounting Surface O-Ring P9 x 2 pc	

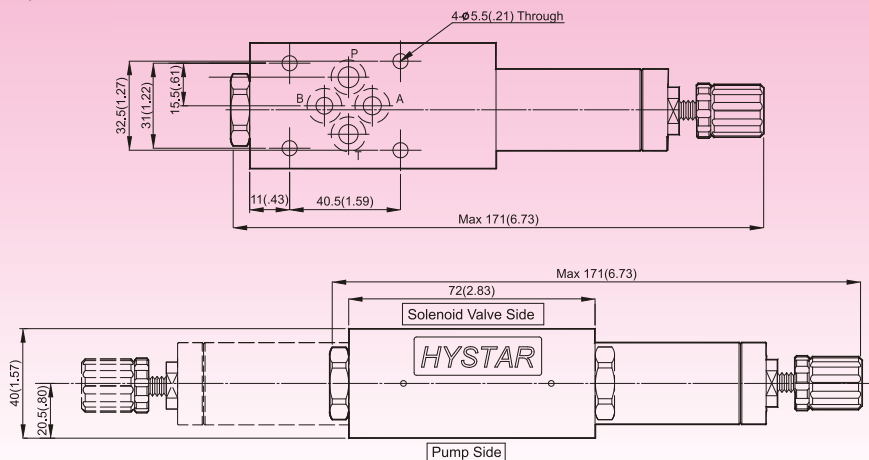


SYMBOL

OPTION
Design No: 30 (3090)



MHB-01



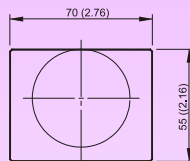
MHA-01

MHB-01

MHB-03

Counterbalance Valves(Modular Type)

MOUNTING SURFACE:MH*-03-CETOP5
ISO 05-NFPAD05



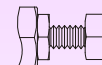
Valve Specifications & Attachment

Flow Rating	100 lpm (26.5 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	3.5 (7.7)
CODE:20	M6 X90LgX4pcs
CODE:2090	1/4-20UNCX3-1/2LgX4pcs
Mounting Surface O-Ring P12 x 5 pc	



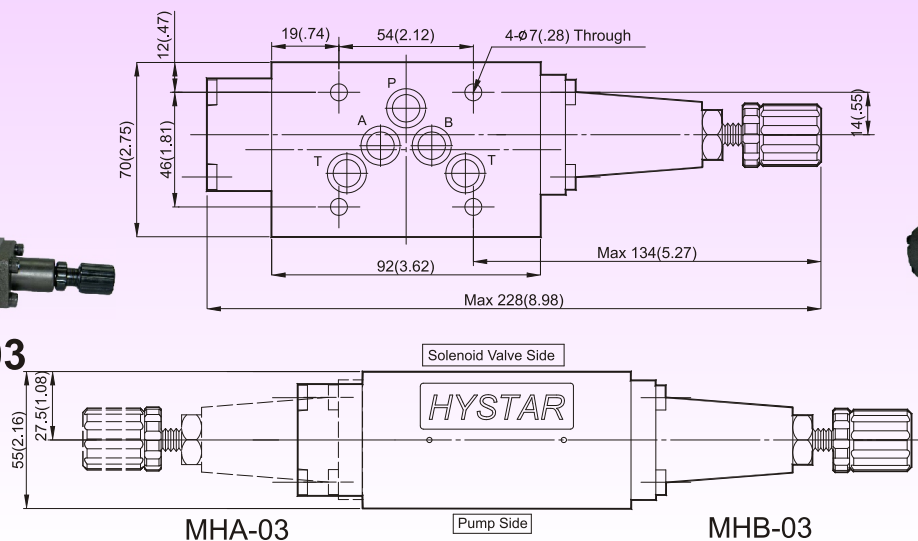
SYMBOL

OPTION
Design No: 30 (3090)



MHB-03

MHP-03



MHA-03

MHB-03

DIMENSIONS

MILLIMETERS(INCHES)

MHB-04

Counterbalance Valves(Modular Type)

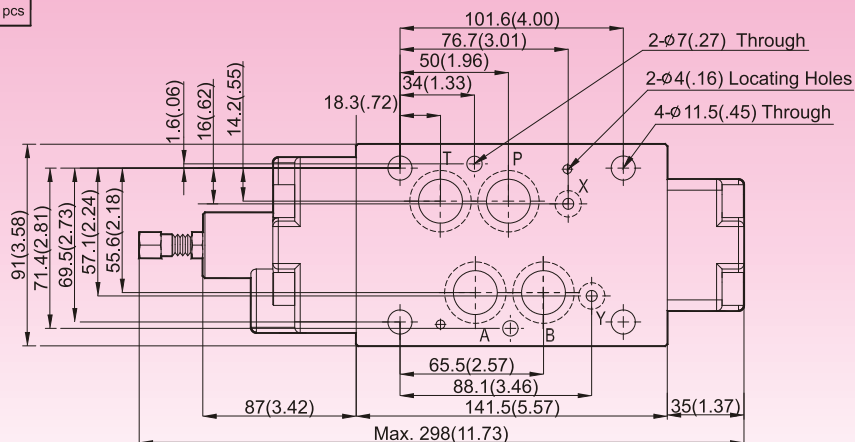
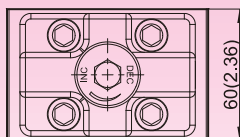
MOUNTING SURFACE:MH*-04-CETOP7
ISO 07-NFPAD07

Valve Speciations & Attachment

Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg.(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring P9 x 2 pc & P22A x 4 pcs	



SYMBOL



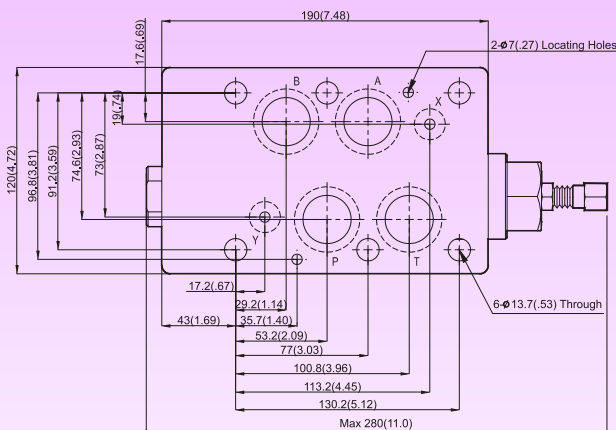
MHB-06

Counterbalance Valves(Modular Type)

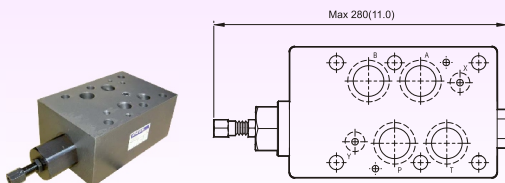
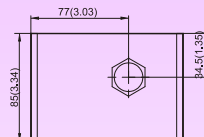
MOUNTING SURFACE:MH*-06-CETOP8
ISO 08-NFPAD08



SYMBOL



MHB-06



MHA-06

Valve Speciations & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg.(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring P12 x 2 pc, P28 x 4 pcs	



MODULAR CONTROL VALVES

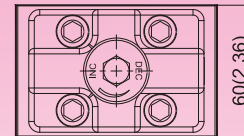
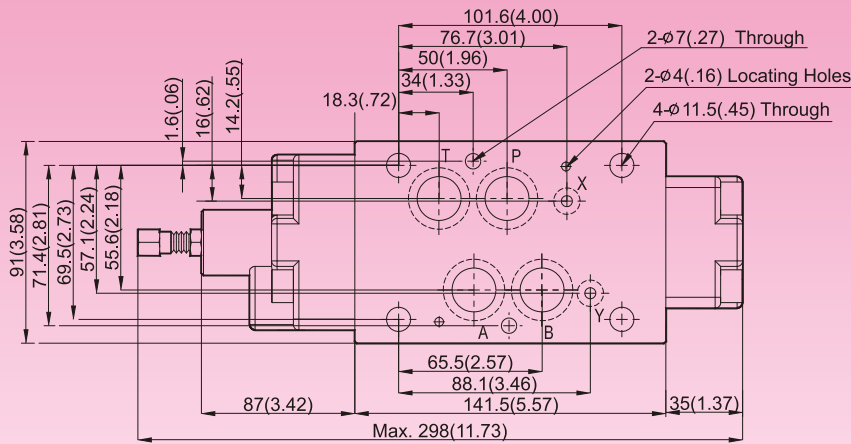
DIMENSIONS

MILLIMETERS(INCHES)

MHP-04

Sequence Valves(Modular Type)

MOUNTING SURFACE:MH*-04-CETOP7
ISO 07-NFPAD07



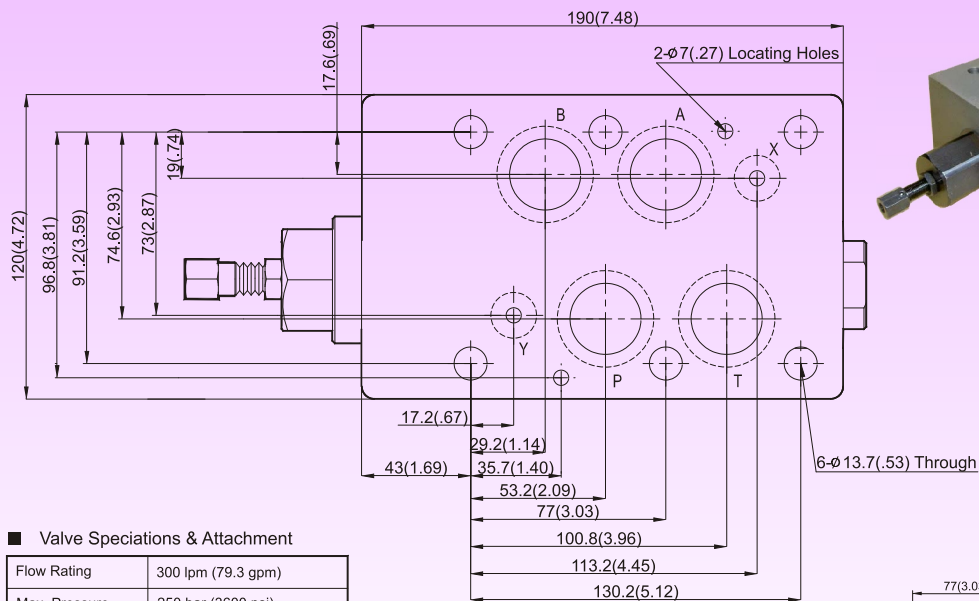
Valve Specifications & Attachment

Flow Rating	190 lpm (50.2 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	7.0 (15.4)
CODE:20	M6X125LgX2pcs M10X120LgX4pcs
CODE:2090	1/4-20UNCX4-7/8"LgX2pcs 3/8-16UNCX4-5/8"Lg X4pcs
Mounting Surface O-Ring P9 x 2 pc & P22A x 4 pcs	

MHP-06

Sequence Valves(Modular Type)

MOUNTING SURFACE:MH*-06-CETOP8
ISO 08-NFPAD08



Valve Specifications & Attachment

Flow Rating	300 lpm (79.3 gpm)
Max. Pressure	250 bar (3600 psi)
Weight kg(lbs.)	11.2 (24.6)
CODE:20	M12X140LgX6pcs
CODE:2090	1/2-13UNCX4-5/8"Lg X6pcs
Mounting Surface O-Ring P12 x 2 pc, P28 x 4 pcs	

