



QHTM VALVES

DIRECTIONNELLES / DIRECTIONAL

CONTRÔLE DE DÉBIT / FLOW CONTROL

CONTRÔLE DE PRESSION / PRESSURE CONTROL

SÉCURITÉ / SECURITY



www.QuebecHydraulique.comTM



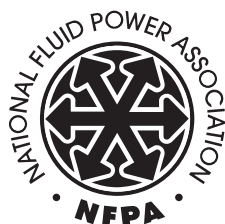
SELECTION
LIENS RAPIDES / QUICK LINKS

DIRECTIONS

- ORBITROL / STEERING VALVE
- VALVE POUR FENDEUSE / LOG SPLITTER VALVE
- VALVES DIRECTIONNELLE / DIRECTIONAL VALVES
MONOBLOC & SECTIONAL
 - PROPORTIONNELLES / PROPORTIONAL
- VALVES DIRECTIONNELLE / DIRECTIONAL VALVES
ISO CETOP SOLENOID TYPE
- VALVES MODULAIRES / MODULAR VALVES
ISO CETOP SANDWICH TYPE
 - EMBASSES MULTIPLE / MANIFOLD BLOCKS
- VALVES CARTOUCHE / CARTRIDGE VALVES
SOLENOID TYPE
- DÉVIATEURS / DIVERTERS
- ROBINETS A BILLE H.P. / H.P. BALL VALVES
CARBON STEEL & STAINLESS STEEL
- CLAPETS ANTI-RETOUR / CHECK VALVES

CONTROL

- PROPORTIONNEL / PROPORTIONAL
- LEVIER DE CONTROLE / CONTROL LEVER
- CABLES ET LEVIERS / CABLES AND LEVERS
- JOYSTICK ÉLECTRIQUE / ELECTRICAL JOYSTICK





VALVES INDEX

FLOW / DÉBIT

PRESSURE / PRESSION

SELECTION LIENS RAPIDES / QUICK LINKS

- VALVES A POINTEAU / NEEDLE VALVES
- RÉGULATEURS DE DÉBIT / FLOW CONTROL
- DIVISEURS DE DÉBIT PRESSION COMPENSÉE /
PRESSURE COMPENSATING FLOW DIVIDER
- DIVISEURS DE DÉBIT A ENGRENAGES /
GEAR FLOW DIVIDERS
- VALVES DE DÉCHARGE DE PRESSION /
PRESSURE RELIEF VALVES
- VALVES DE CONTRÔLE DE PRESSION /
PRESSURE CONTROL VALVES





VALVES INDEX

SECURITY / SÉCURITÉ

SELECTION
LIENS RAPIDES / QUICK LINKS

--VALVES DE MAINTIEN / HOLDING VALVES



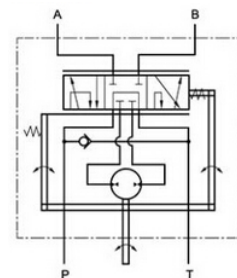


DIRECTIONS

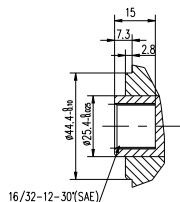
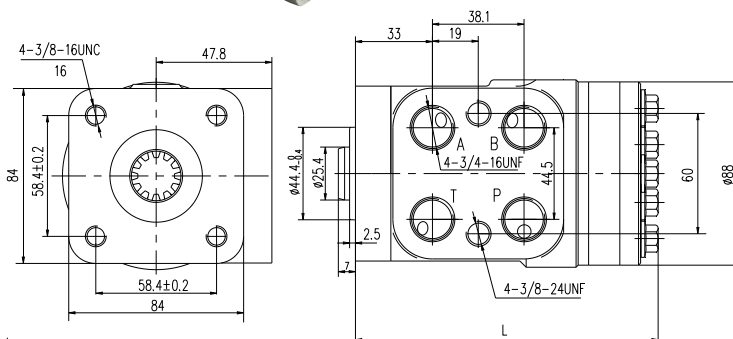
ORBITROL / STEERING VALVE



- OPEN CENTER, NON LOAD REACTION
- MAX PRESSURE: 2300 PSI
- SHAFT INPUT: 12 th - 16/32 - 30 (SAE) T SPLINE



PART NO	DISPLACEMENT in ³ (cm ³) / rev.	LENGHT (IN)
QH070-1341	4.9 (80)	5.1
QH070-1532	6.1 (100)	5.2
QH070-1533	7.6 (125)	5.3
QH070-1334	9.7 (160)	5.5
QH070-1335	12.2 (200)	5.8
QH070-1336	15.2 (250)	5.9



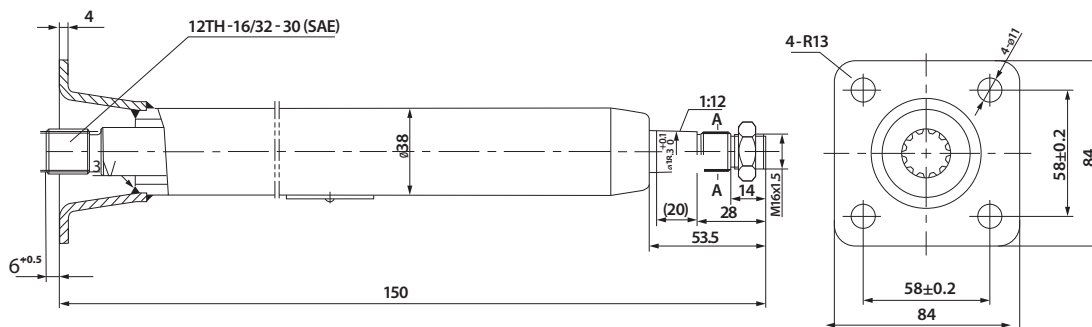
DIMENSIONS

cm ³ /rev	80	100	125	160	200	250	315	400	500
DIM "L"	129.5	132	135	140	145	151	161	171	183

COLONNE / COLUMNS

- FITS ALSO ON MOST COMMON DANFOSS & CHARLYNN UNITS

PART NO	LENGHT
QH651-1579-S	6"
QH650-1500-S	8"
QH651-1504-S	16"



LENGHT



DIRECTIONS

VALVE POUR FENDEUSE / LOG SPLITTER VALVE



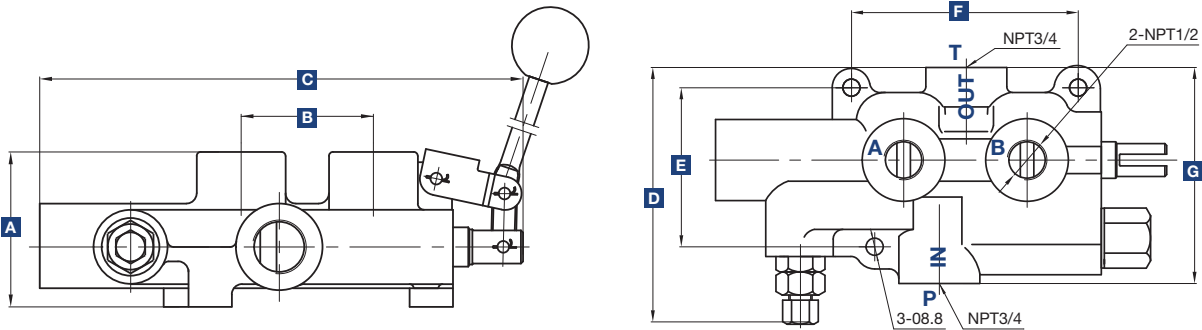
MONOBLOCK TYPE

SPECIFICATIONS



■ Construction	Cast iron body, Chrome-plated spool
■ Flow	Up to 25 gpm
■ Adjustable Relief Valve Pressure	0-2900 psi
■ Adjustable Detent Release Pressure	1000-2000 psi
■ Pressure Drop (P to A or B)	43 psi at 20 gpm
■ Pressure Drop (P to T)	12 psi at 20 gpm
■ Pressure and Tank Ports	3/4" NPT
■ Work ports (A and B)	1/2" NPT

DIMENSIONS



Model	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lbs)
QHLS-3000	3.03	2.60	9.21	5.20	3.25	4.63	4.57	--

CODE INFORMATION

QHLS - 3000

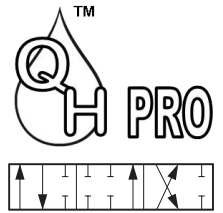
Log Splitter
Valve
series



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



AVAILABLE FROM 1 TO 6 SPOOLS

QH06 SERIES



QHTMPRO valve model QH06 is a 6 gpm (25l/m) monoblock directional valve that is available from single spool through 6 spool configurations. They feature metered spools for smooth shifting and transition, built in adjustable relief valve, hardened steel spools and come standard with SAE 8 work and inlet/outlet ports. The hand levers are field adjustable for either horizontal or vertical mounting. Field convertible to utilize the power beyond plug. Stock configurations with open center, blocked center for cylinder applications or Pressure blocked, A & B to Tank center position for motor applications.

Applications:

- Agricultural
- Construction
- Mining
- Material handling equipment
- Maintenance machinery

TECHNICAL DATA

Nominal Flow Rate	6 GPM	25 L/min
Max Flow Rate	8 GPM	30 L/min
Sections Available	1 to 6 Sections	
Max. Operating Pressure	3600 psi	250 bar
Max Pressure for P port	3600 psi	250 bar
Max Pressure for A & B port	3600 psi	250 bar
Max Pressure for T port	360 psi	25 bar
Recommended Oil Viscosity Range	0.02 to 0.12 in ² /s	15 to 75 mm ² /s
Recommended Temperature Range	-40F to 140F	-40C to 60C

STANDARD THREADS

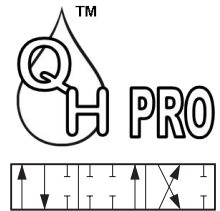
Ports	Inlet P	A and B	Outlet T	Outlet C
	9/16-8 (SAE 6)	9/16-8 (SAE 6)	9/16-8 (SAE 6)	9/16-8 (SAE 6)



DIRECTIONS

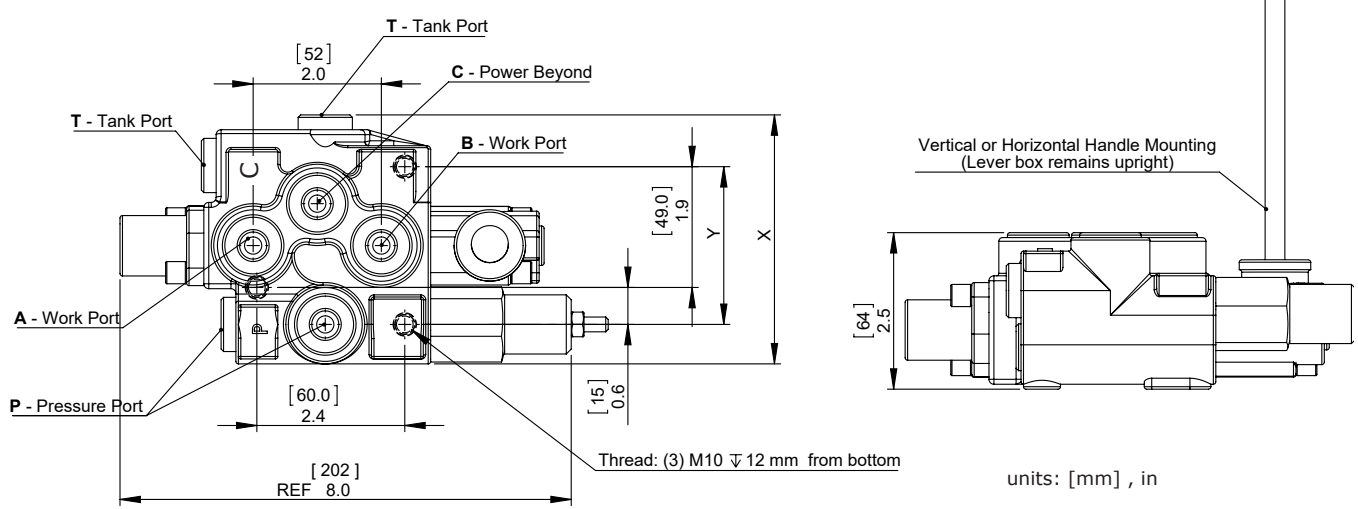
VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



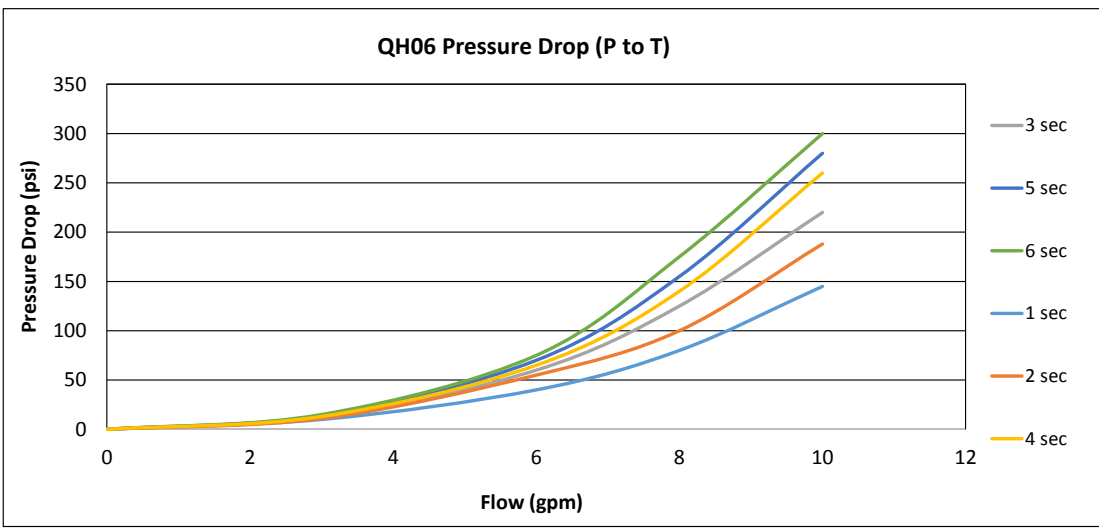
AVAILABLE FROM 1 TO 6 SPOOLS

QH06 - DIMENSIONS



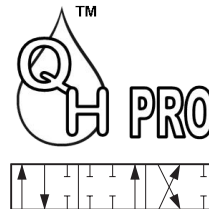
STANDARD DIMENSIONS

Model	X		Y	
	inch	mm	inch	mm
QH06 - 1 Spool	3.9	100	2.5	64
QH06 - 2 Spool	5.2	132	3.8	96
QH06 - 3 Spool	6.5	164	5.0	128
QH06 - 4 Spool	7.7	196	6.3	160
QH06 - 5 Spool	9.0	228	7.6	192
QH06 - 6 Spool	10.3	260	8.9	224





VALVES DIRECTIONNELLE / DIRECTIONAL VALVES



MONOBLOCK TYPE

CODE INFORMATION

Example : First Spool Second Spool

QH06 - 2S - R2 - D1 - 1 - L - D2 - 1 - L - 6S - M8

1. BODY KITS :

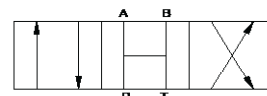
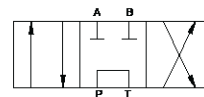
1S	-	1 Section	4S	-	4 Section
2S	-	2 Section	5S	-	5 Section
3S	-	3 Section	6S	-	6 Section

2. INLET RELIEF:

R2	-	40 Bar to 180 Bar (580 psi to 2610 psi), Standard Setting 80 Bar (1160 psi)
R3	-	63 Bar to 200 Bar (914 psi to 2900 psi), Standard Setting 120 Bar (1740 psi)
R4	-	160 Bar to 315 Bar (2320 psi to 4568 psi), Standard Setting 220 Bar (3190 psi)
SV	-	Relief valve blanking plug

3. SPOOL TYPE:

D1	-	4 Way 3 Position A, B Closed in Neutral Position
D2	-	4 Way 3 Position A, B Open to Tank in neutral Position



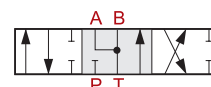
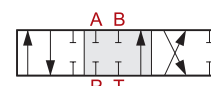
4. A SIDE SPOOL POSITION

1	-	3 Position Detent
S	-	Spring Center to Neutral
DS3	-	Detent in position 1 with spring centered



5. B SIDE SPOOL POSITION

L	-	Lever Handle
DP	-	Dust Plate (No handle and handle box)



6. THREAD

6S	-	A & B Ports - 9/16-8 (SAE6)
-----------	---	-----------------------------

7. OPTIONS

M3	-	No Power Beyond
M8	-	Power Beyond

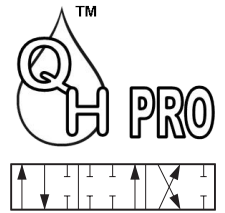
*Other options available upon request



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



AVAILABLE IN 1 SPOOL ONLY

QHS12 SERIES

QHTMPRO valve model QHS12 is a 12 gpm (45 l/m) monoblock directional valve that is only offered in a single spool configuration for a compact design. QHS12 features metered spools for smooth shifting and transition, built in adjustable relief valve, hardened steel spools and come standard with SAE 8 work and inlet/outlet port. The hand levers are field adjustable for either horizontal or vertical mounting. Stock configurations with open center, blocked center for cylinder applications or Pressure blocked, A & B to Tank center position for motor applications.

Applications:

- Agricultural
- Construction
- Mining
- Material handling equipment
- Maintenance machinery

TECHNICAL DATA

Nominal Flow Rate	12 GPM	45 L/min
Max Flow Rate	14 GPM	55 L/min
Sections Available	1 Section	
Max. Operating Pressure	4500 psi	310 bar
Max Pressure for P port	4500 psi	310 bar
Max Pressure for A & B port	4500 psi	310 bar
Max Pressure for T port	360 psi	25 bar
Recommended Oil Viscosity Range	0.02 to 0.12 in ² /s	15 to 75 mm ² /s
Recommended Temperature Range	-40F to 140F	-40C to 60C

STANDARD THREADS

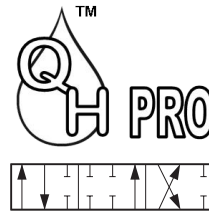
Ports	Inlet P	A and B	Outlet T
	3/4-16 (SAE 8)	3/4-16 (SAE 8)	3/4-16 (SAE 8)



DIRECTIONS

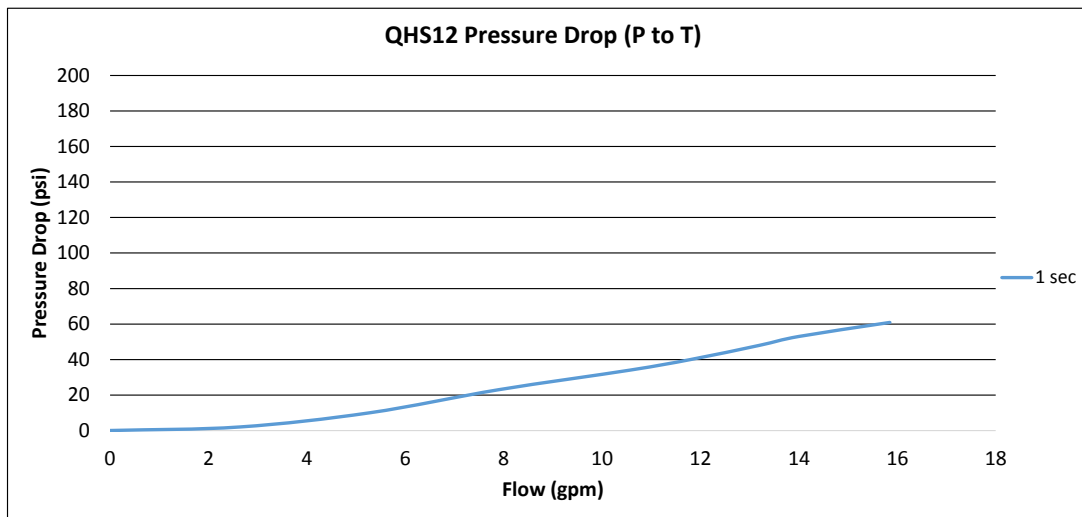
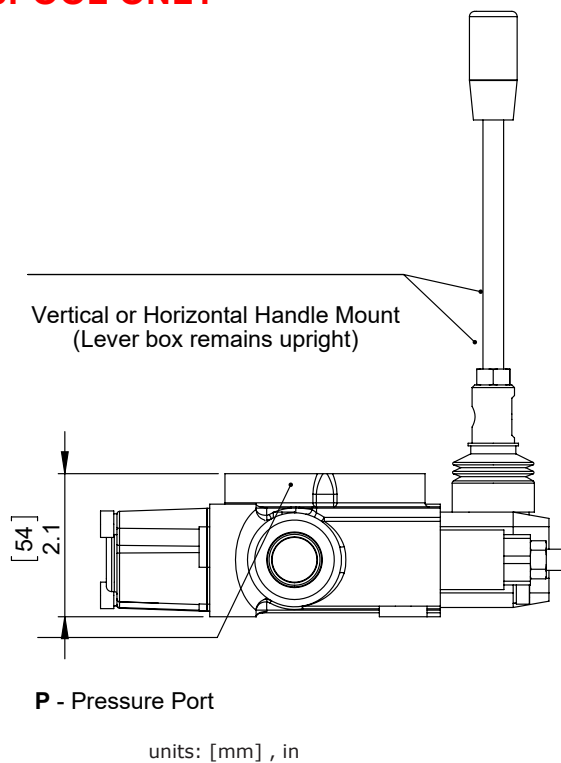
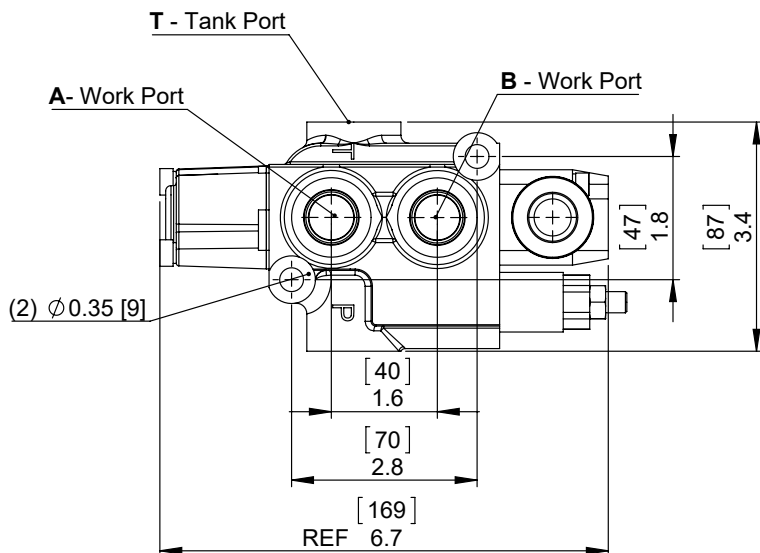
VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



QHS12 - DIMENSIONS

AVAILABLE IN 1 SPOOL ONLY

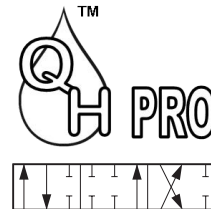




DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



CODE INFORMATION

Example :

QHS12 - 1S - R2 - D1 - 1 - L - 8S - M1

1. BODY KITS :

1S - 1 Section (Only offered with 1 section)

2. INLET RELIEF:

R2 - 40 Bar to 180 Bar (580 psi to 2610 psi), Standard Setting 80 Bar (1160 psi)

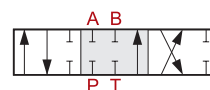
R3 - 63 Bar to 200 Bar (914 psi to 2900 psi), Standard Setting 120 Bar (1740 psi)

R4 - 160 Bar to 315 Bar (2320 psi to 4568 psi), Standard Setting 220 Bar (3190 psi) Relief valve

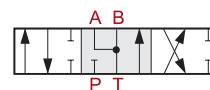
SV blanking plug

3. SPOOL TYPE:

D1 - 4 Way 3 Position
A, B Closed in Neutral Position



D2 - 4 Way 3 Position
A, B Open to Tank in neutral Position



4. A SIDE SPOOL POSITION

1 - 3 Position Detent



S - Spring Center to Neutral



5. B SIDE SPOOL POSITION

L - Lever Handle

DP - Dust Plate (No handle and handle box)

6. THREAD

8S - A & B Ports - 3/4-16 (SAE8)

7. PORT

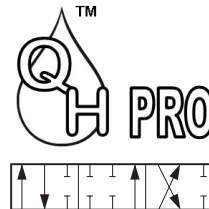
M1 - No Power Beyond



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



AVAILABLE FROM 1 TO 6 SPOOLS

QH12SERIES



QHTMPRO valve model QH12 is a 12 gpm (45 l/m) monoblock directional valve that is available from single spool through 6 spool configurations. They feature metered spools for smooth shifting and transition, built in adjustable relief valve, hardened steel spools and come standard with SAE 8 work and inlet/outlet ports. The hand levers are field adjustable for either horizontal or vertical mounting. Field convertible to utilize the power beyond plug. Stock configurations with open center, blocked center for cylinder applications or Pressure blocked, A & B to Tank center position for motor applications.

Applications:

- Agricultural
- Construction
- Mining
- Material handling equipment
- Maintenance machinery

TECHNICAL DATA

Nominal Flow Rate	12 GPM	45 L/min
Max Flow Rate	14 GPM	55 L/min
Sections Available	1-6	
Max. Operating Pressure	4500 psi	310 bar
Max Pressure for P port	4500 psi	310 bar
Max Pressure for A & B port	4500 psi	310 bar
Max Pressure for T port	360 psi	25 bar
Recommended Oil Viscosity Range	0.02 to 0.12 in ² /s	15 to 75 mm ² /s
Recommended Temperature Range	-40F to 140F	-40C to 60C

STANDARD THREADS

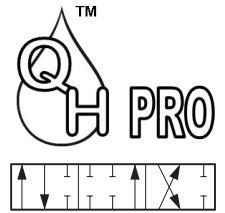
Ports	Inlet P	A and B	Outlet T	Outlet C
	3/4-16 (SAE 8)	3/4-16 (SAE 8)	3/4-16 (SAE 8)	3/4-16 (SAE 8)



DIRECTIONS

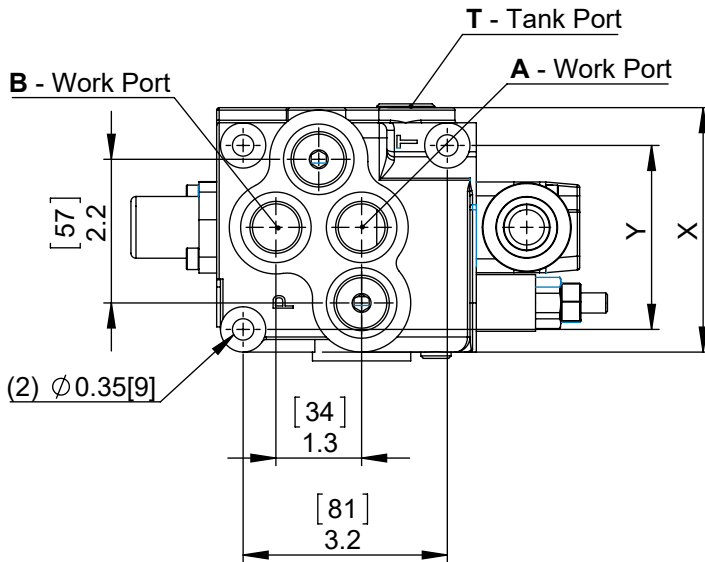
VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE

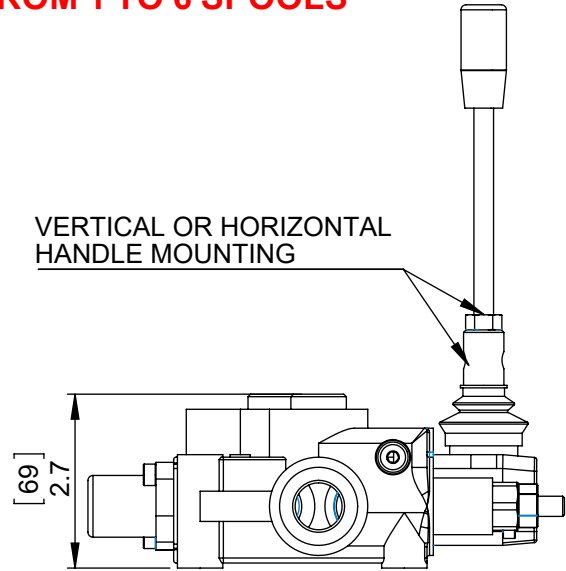


AVAILABLE FROM 1 TO 6 SPOOLS

QH12 - DIMENSIONS



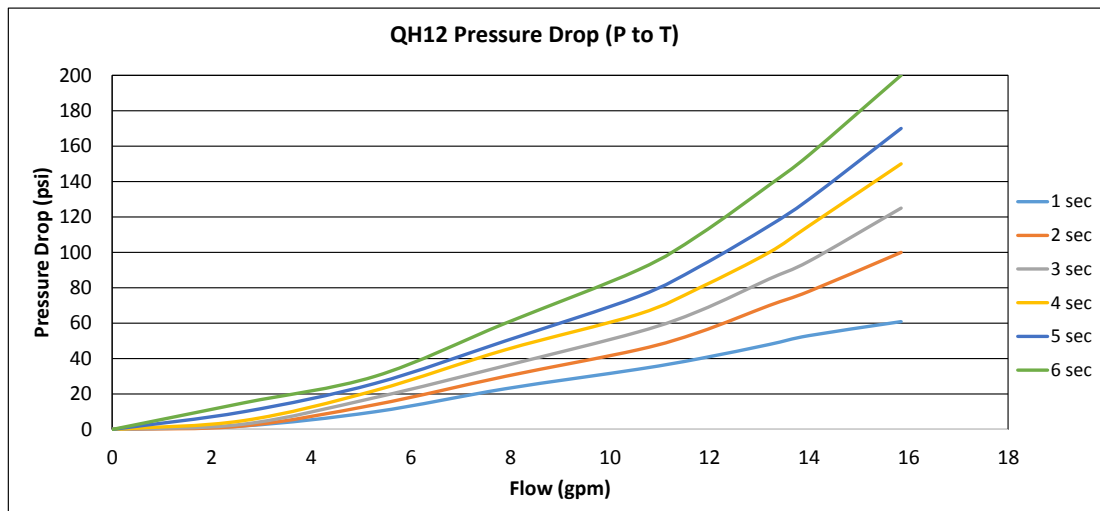
VERTICAL OR HORIZONTAL
HANDLE MOUNTING



units: [mm] , in

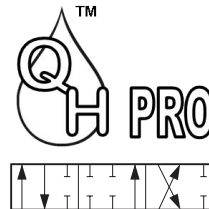
STANDARD DIMENSIONS

Model	X		Y		Z	
	inch	mm	inch	mm	inch	mm
QH12 - 1 Spool	3.9	100.5	2.8	73	2.8	70
QH12 - 2 Spool	5.4	137.5	4.3	110	3.2	81
QH12 - 3 Spool	6.9	174.5	5.7	147	3.2	81
QH12 - 4 Spool	8.3	211.5	6.3	160	3.2	81
QH12 - 5 Spool	9.7	248.5	8.6	220	3.2	81
QH12 - 6 Spool	11.2	285.5	10.2	260	3.2	81





VALVES DIRECTIONNELLE / DIRECTIONAL VALVES



MONOBLOCK TYPE

CODE INFORMATION

Example : First Spool

QH12 - 2S - R2 - D1 - 1 - L - D2 - 1 - L - 8S - M8

1. BODY KITS :

1S - 1 Section

2S - 2 Section

3S - 3 Section

4S - 4 Section

5S - 5 Section

6S - 6 Section

2. INLET RELIEF:

R2 - 40 Bar to 180 Bar (580 psi to 2610 psi), Standard Setting 80 Bar (1160 psi)

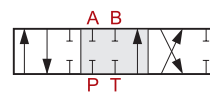
R3 - 63 Bar to 200 Bar (914 psi to 2900 psi), Standard Setting 120 Bar (1740 psi)

R4 - 160 Bar to 315 Bar (2320 psi to 4568 psi), Standard Setting 220 Bar (3190 psi) Relief valve

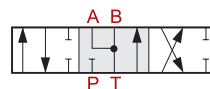
SV - blanking plug

3. SPOOL TYPE:

D1 - 4 Way 3 Position
A, B Closed in Neutral Position



D2 - 4 Way 3 Position
A, B Open to Tank in neutral Position



4. A SIDE SPOOL POSITION

1 - 3 Position Detent



S - Spring Center to Neutral



DS3 - Detent in position 1 with spring centered



5. B SIDE SPOOL POSITION

L - Lever Handle

DP - Dust Plate (No handle and handle box)

J - Joystick lever for 2 section operation

6. THREAD

8S - A & B Ports- 3/4-16 (SAE8)

7. OPTIONS

M3 - No Power Beyond

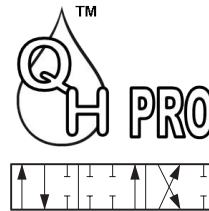
M8 - Power Beyond



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



AVAILABLE FROM 1 TO 6 SPOOLS



QH18 SERIES

QMTMPRO valve model QH18 is a 18 gpm (70 l/m) monoblock directional valve that is available from single spool through 6 spool configurations. They feature metered spools for smooth shifting and transition, built in adjustable relief valve, hardened steel spools and come standard with SAE 10 & SAE-12 work and inlet/outlet ports. The hand levers are field adjustable for either horizontal or vertical mounting. Field convertible to utilize the power beyond plug. Stock configurations with open center, blocked center for cylinder applications or Pressure blocked, A & B to Tank center position for motor applications.

Applications:

- Agricultural
- Construction
- Mining
- Material handling equipment
- Maintenance machinery

TECHNICAL DATA

Nominal Flow Rate	18 GPM	70 L/min
Max Flow Rate	21 GPM	80 L/min
Sections Available	1-6	
Max. Operating Pressure	4500 psi	310 bar
Max Pressure for P port	4500 psi	310 bar
Max Pressure for A & B port	4500 psi	310 bar
Max Pressure for T port	360 psi	25 bar
Recommended Oil Viscosity Range	0.02 to 0.12 in ² /s	15 to 75 mm ² /s
Recommended Temperature Range	-40F to 140F	-40C to 60C

STANDARD THREADS

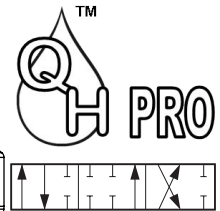
Ports	Inlet P	A and B	Outlet T	Outlet C
	7/8-14 (SAE 10)	7/8-14 (SAE 10)	1-1/16-12 (SAE 12)	7/8-14 (SAE 10)



DIRECTIONS

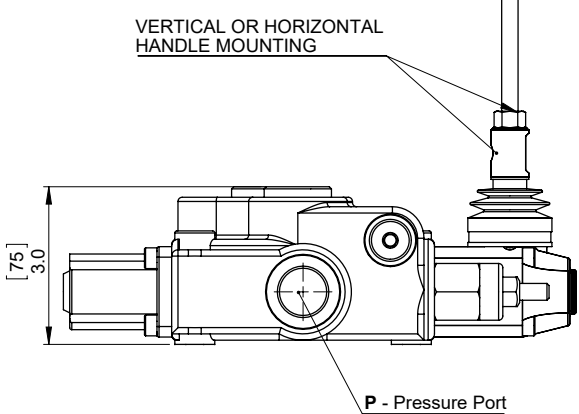
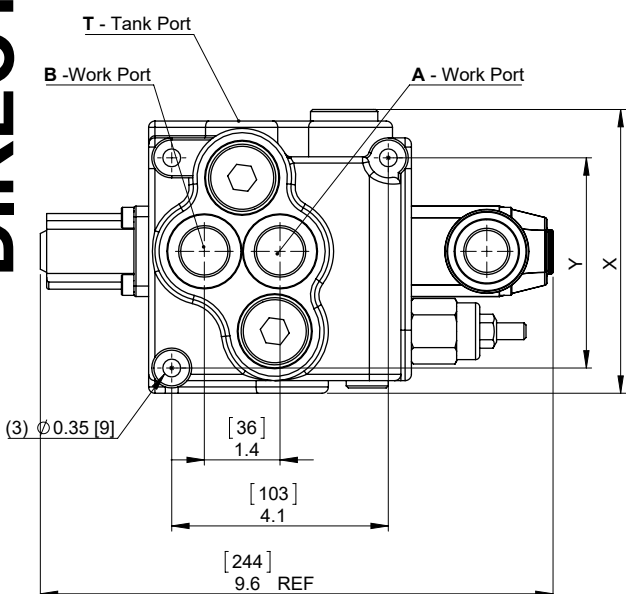
VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



AVAILABLE FROM 1 TO 6 SPOOLS

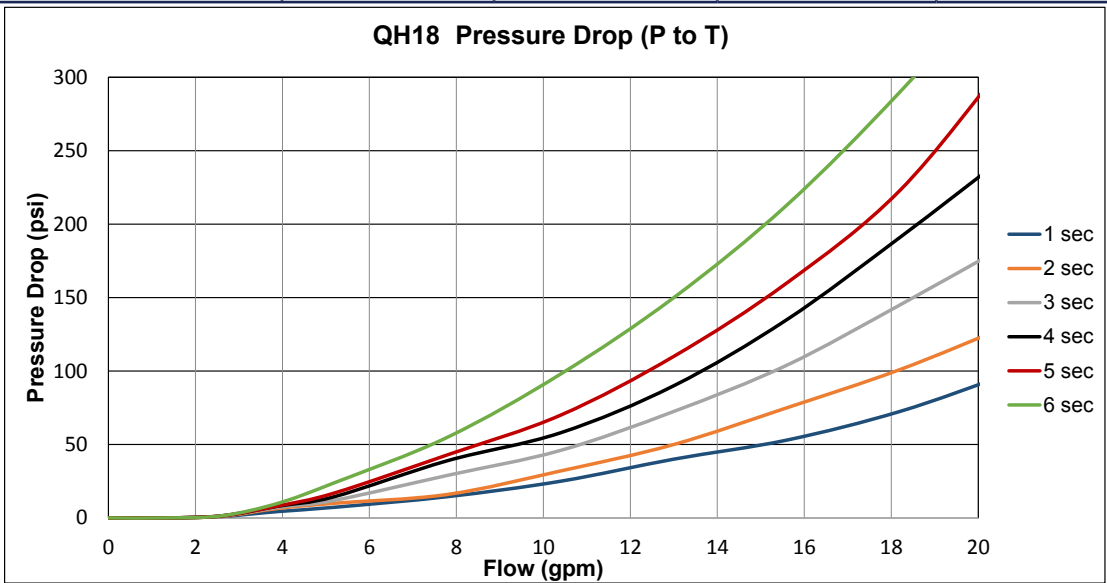
QH18 - DIMENSIONS



units: [mm] , in

STANDARD DIMENSIONS

Model	X		Y	
	inch	mm	inch	mm
QH18 - 1 Spool	5.3	135	3.9	100
QH18 - 2 Spool	7.1	180	5.7	145
QH18 - 3 Spool	8.9	225	7.5	190
QH18 - 4 Spool	10.6	270	9.3	235
QH18 - 5 Spool	12.4	315	11	280
QH18 - 6 Spool	14.2	360	12.8	325

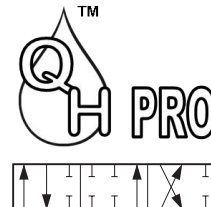




DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



CODE INFORMATION

Example

		First Spool				Second Spool														
QH18	-	2S	-	R2	-	D1	-	1	-	L	-	D2	-	1	-	L	-	10S	-	M3

1. BODY KITS :

1S - 1 Section

2S - 2 Section

3S - 3 Section

4S - 4 Section

5S - 5 Section

6S - 6 Section

2. INLET RELIEF:

R2 - 40 Bar to 180 Bar (580 psi to 2610 psi), Standard Setting 80 Bar (1160 psi)

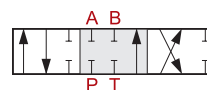
R3 - 63 Bar to 200 Bar (914 psi to 2900 psi), Standard Setting 120 Bar (1740 psi)

R4 - 160 Bar to 315 Bar (2320 psi to 4568 psi), Standard Setting 220 Bar (3190 psi) Relief valve

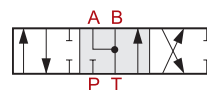
SV blanking plug

3. SPOOL TYPE:

D1 - 4 Way 3 Position
A, B Closed in Neutral Position



D2 - 4 Way 3 Position
A, B Open to Tank in neutral Position



4. A SIDE SPOOL POSITION 1

- 3 Position Detent



S - Spring Center to Neutral



5. B SIDE SPOOL POSITION L

- Lever Handle

DP - Dust Plate (No handle or handle box)

6. THREAD

10S - A & B Ports- 7/8-14 (SAE 10)

7. OPTIONS

M3 - No Power Beyond

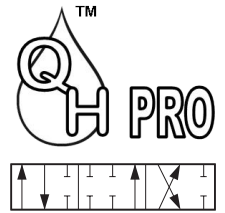
M8 - Power Beyond



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

MONOBLOCK TYPE



AVAILABLE FROM 1 TO 6 SPOOLS

QH21 SERIES

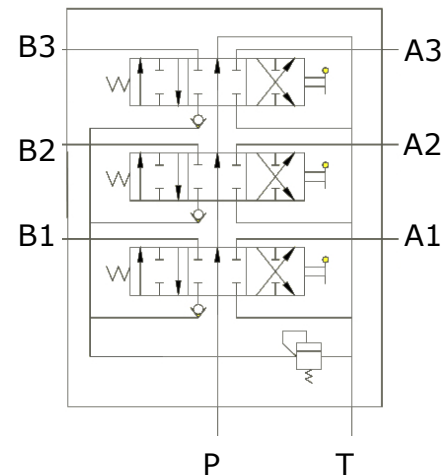
QH™PRO valve model QH21 is a 21 gpm (80 l/m) monoblock directional valve that is available from single spool through 6 spool configurations. They feature metered spools for smooth shifting and transition, built in adjustable relief valve, hardened steel spools and come standard with SAE 8 work and inlet/outlet ports. The hand levers are field adjustable for either horizontal or vertical mounting. Field convertible to utilize the included power beyond plug. Stock configurations with open center, blocked center for cylinder applications or Pressure blocked, A & B to Tank center position for motor applications. **The QH21 comes with load check valve feature for each section as a standard.** Relief valve is an optional alternative. The check valve will prevent the load from falling as the spool is shifted. It does this by preventing the back-flow of oil from work port to inlet. The check valve does not hold load when the spool is in neutral.

Applications:

- Agricultural
- Construction
- Mining
- Material handling equipment
- Maintenance machinery

TECHNICAL DATA

Nominal Flow Rate	21 GPM	80 L/min
Max Flow Rate	26 GPM	100 L/min
Sections Available	1-6	
Max. Operating Pressure	4500 psi	310 bar
Max Pressure for P port	4500 psi	310 bar
Max Pressure for A & B port	4500 psi	310 bar
Max Pressure for T port	360 psi	25 bar
Oil Viscosity Range	0.02 to 0.12 in ² /s	15 to 75 mm ² /s
Temperature Range	-40F to 140F	-40C to 60C



STANDARD THREADS

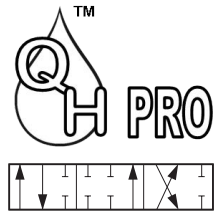
Ports	Inlet P	A and B	Outlet T and C
	1-1/16-12 (SAE 12)	1-1/16-12 (SAE 12)	1-1/16-12 (SAE 12)



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

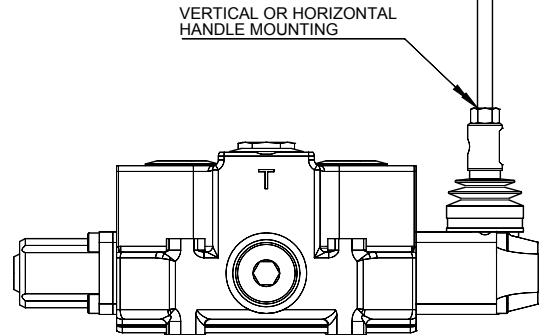
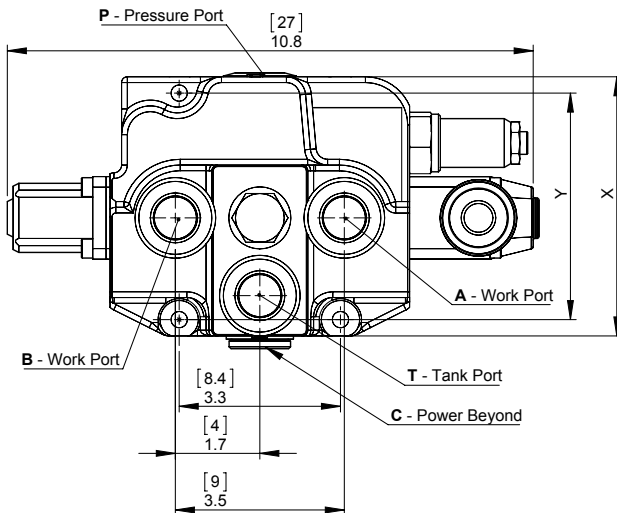
MONOBLOCK TYPE



AVAILABLE FROM 1 TO 6 SPOOLS

QH21 - DIMENSIONS

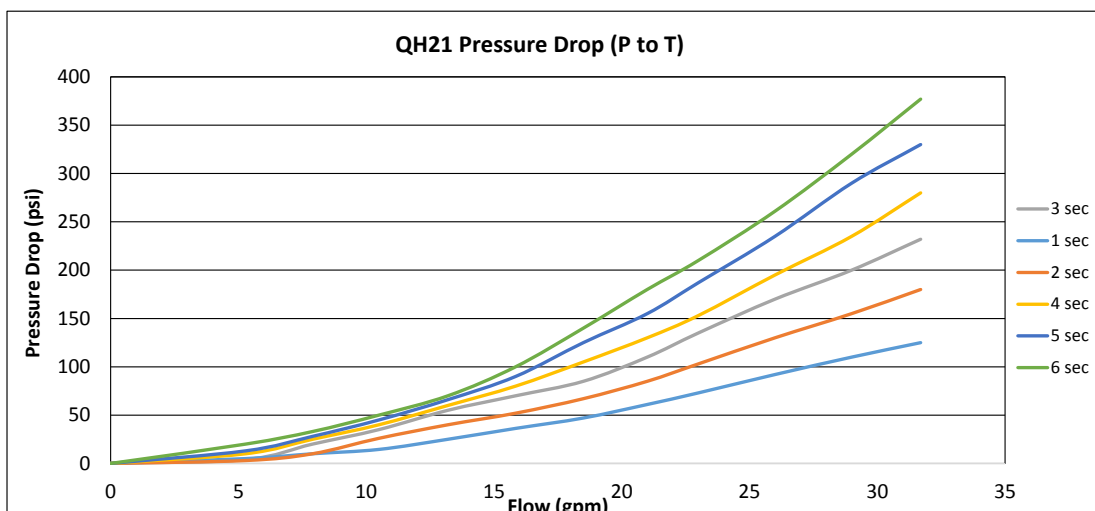
The QH21 comes with load check valve feature for each section as a standard. Relief valve is an optional alternative. The check valve will prevent the load from falling as the spool is shifted. It does this by preventing the back-flow of oil from work port to inlet. The check valve does not hold load when the spool is in neutral.



units: [mm] , in

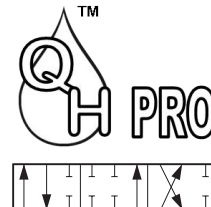
STANDARD DIMENSIONS

Model	X		Y	
	inch	mm	inch	mm
QH21 - 1 Spool	5.3	135	4.6	118
QH21 - 2 Spool	7.1	180	6.4	163
QH21 - 3 Spool	8.9	225	8.2	208
QH21 - 4 Spool	10.3	261.5	10.0	253
QH21 - 5 Spool	12.4	315	11.7	298
QH21 - 6 Spool	14.2	360	13.5	343





VALVES DIRECTIONNELLE / DIRECTIONAL VALVES



MONOBLOCK TYPE

CODE INFORMATION

Example :

First Spool
D1 - 1 - L

Second Spool
D2 - 1 - L

 - 12S - M3

1. BODY KITS :

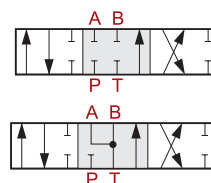
1S	-	1 Section	4S	-	4 Section
2S	-	2 Section	5S	-	5 Section
3S	-	3 Section	6S	-	6 Section

2. INLET RELIEF:

R2	-	40 Bar to 180 Bar (580 psi to 2610 psi), Standard Setting 80 Bar (1160 psi)
R3	-	63 Bar to 200 Bar (914 psi to 2900 psi), Standard Setting 120 Bar (1740 psi)
R4	-	160 Bar to 315 Bar (2320 psi to 4568 psi), Standard Setting 220 Bar (3190 psi) Relief valve
SV	-	blanking plug

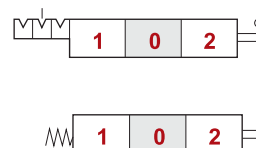
3. SPOOL TYPE:

D1	-	4 Way 3 Position A, B Closed in Neutral Position
D2	-	4 Way 3 Position A, B Open to Tank in neutral Position



4. B SIDE SPOOL POSITION 1

- 3 Position Detent
- S** - Spring Center to Neutral



5. A SIDE SPOOL POSITION

- L** - Lever Handle

6. THREAD

- 12S** - A & B Ports - 1-1/16-12 (SAE 12)

7. OPTIONS

- M3** - No Power Beyond
- M8** - Power Beyond



VALVES DIRECTIONNELLE / DIRECTIONAL VALVES



MONOBLOCK TYPE

**FITS "SD4"
WALVOIL FOOTPRINT**

LOTS OF OPTIONS AVAILABLE

MB2 MANUAL VALVES

- BLACK PAINTED
- DOUBLE ACTING SPOOL, SPRING RETURN WITH LEVERS
- OPEN CENTER ONLY, NO POWER BEYOND
- HANDLES INCLUDED
- RELIEF SET TO 2550 PSI

PART NUMBER	NB OF SPOOL	GPM MAX	PSI MAX	PORTS
QHMB2/1S-3/18L/E8-M1	1	12	3600	SAE-08



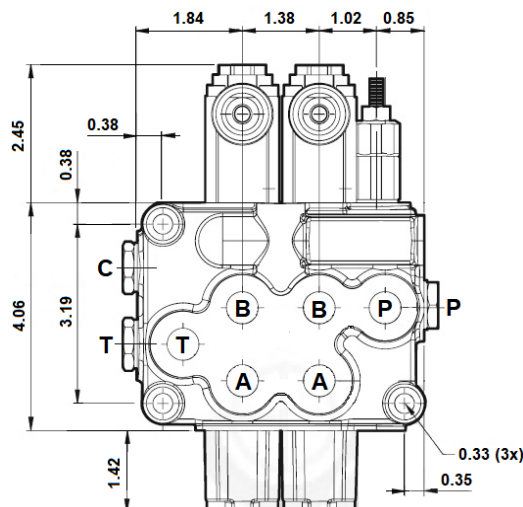
MB3 MANUAL VALVES

- BLACK PAINTED
- DOUBLE ACTING SPOOL, SPRING RETURN WITH LEVERS
- OPEN/CLOSED CENTER
- POWER BEYOND OPTION
- HANDLES INCLUDED
- RELIEF SET TO 2550 PSI

**FITS "SD5"
WALVOIL FOOTPRINT**

LOTS OF OPTIONS AVAILABLE

PART NUMBER	NB OF SPOOL	GPM MAX	PSI MAX	PORTS
QHMB3/1S-3/18L/E8-M1	1	12	4600	SAE-08
QHMB3/2S-3/18L/E8-M2	2			
QHMB3/3S-3/18L/E8-M3	3			
QHMB3/4S-3/18L/E8-M4	4			
QHMB3/5S-3/18L/E8-M5	5			
QHMB3/6S-3/18L/E8-M6	6			
QHMB3/7S-3/18L/E8-M7	7			



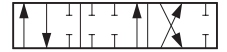
ALSO AVAILABLE

- MOTOR AND SINGLE ACTING
- DETENT, FLOAT CONTROLS
- ELECTRIC, AIR AND CABLE CONTROLS
- 2 AXIS JOYSTICK
- LIMIT SWITCH



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

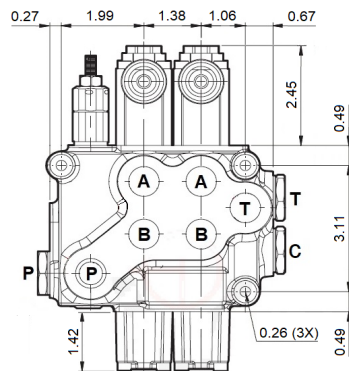


MONOBLOCK TYPE

MB4 MANUAL VALVES

- BLACK PAINTED
- DOUBLE ACTING SPOOL, SPRING RETURN WITH LEVERS
- OPEN/CLOSED CENTER. POWER BEYOND OPTION
- HANDLES INCLUDED
- RELIEF SET TO 2550 PSI

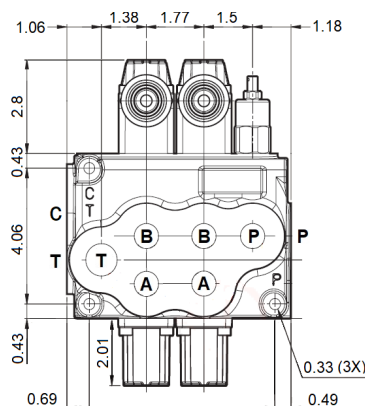
PART NUMBER	NB OF SPOOL	GPM MAX	PSI MAX	PORTS
QHMB4/1S-3/18L/E8-M3	1	16	4600	SAE-08
QHMB4/2S-3/18L/E8-M3	2			
QHMB4/3S-3/18L/E8-M3	3			
QHMB4/4S-3/18L/E8-M3	4			
QHMB4/5S-3/18L/E8-M3	5			
QHMB4/6S-3/18L/E8-M3	6			



MB5 MANUAL VALVES

- BLACK PAINTED
- DOUBLE ACTING SPOOL, SPRING RETURN WITH LEVERS
- OPEN/CLOSED CENTER. POWER BEYOND OPTION
- HANDLES INCLUDED
- RELIEF SET TO 2550 PSI

PART NUMBER	NB OF SPOOL	GPM MAX	PSI MAX	PORTS
QHMB5/1S-3/18L/E8-M3	1	21	4600	P&T:SAE-12 A&B:SAE-10
QHMB5/2S-3/18L/E8-M3	2			
QHMB5/3S-3/18L/E8-M3	3			
QHMB5/4S-3/18L/E8-M3	4			
QHMB5/5S-3/18L/E8-M3	5			
QHMB5/6S-3/18L/E8-M3	6			



FITS "HCD10"
HYDROCONTROL FOOTPRINT

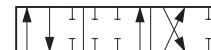
LOTS OF OPTIONS AVAILABLE



FITS "SD11"
WALVOIL FOOTPRINT

LOTS OF OPTIONS AVAILABLE





SECTIONAL TYPE

AVAILABLE SECTIONS FROM 1 TO 12 SPOOLS

QHSN-3

NOMINAL FLOW RATE

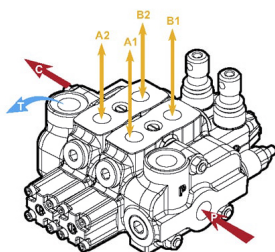
13 GPM

OPERATING PRESSURE
(MAXIMUM) PARALLE CIRCUIT

4600 PSI

BACK PRESSURE (MAXIMUM)
ON OUTLET PORT T

360 PSI



QHSN-4

NOMINAL FLOW RATE

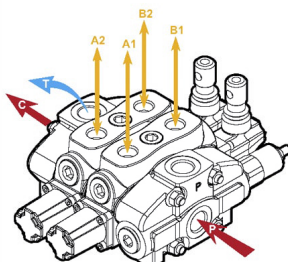
21 GPM

OPERATING PRESSURE
(MAXIMUM) PARALLE CIRCUIT

4600 PSI

BACK PRESSURE (MAXIMUM)
ON OUTLET PORT T

360 PSI



QHSN-5

NOMINAL FLOW RATE

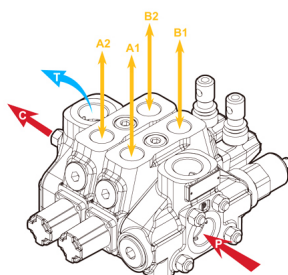
32 GPM

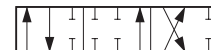
OPERATING PRESSURE
(MAXIMUM) PARALLE CIRCUIT

4600 PSI

BACK PRESSURE (MAXIMUM)
ON OUTLET PORT T

360 PSI





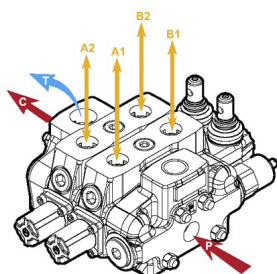
SECTIONAL TYPE

AVAILABLE SECTIONS FROM 1 TO 12 SPOOLS

QHSN-6

NOMINAL FLOW RATE
OPERATING PRESSURE
(MAXIMUM) PARALLE CIRCUIT
BACK PRESSURE (MAXIMUM)
ON OUTLET PORT T

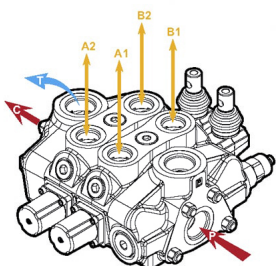
NOMINAL FLOW RATE	42 GPM
OPERATING PRESSURE (MAXIMUM) PARALLE CIRCUIT	4600 PSI
BACK PRESSURE (MAXIMUM) ON OUTLET PORT T	360 PSI

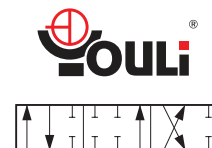


QHSN-8

NOMINAL FLOW RATE
OPERATING PRESSURE
(MAXIMUM) PARALLE CIRCUIT
BACK PRESSURE (MAXIMUM)
ON OUTLET PORT T

NOMINAL FLOW RATE	63 GPM
OPERATING PRESSURE (MAXIMUM) PARALLE CIRCUIT	4600 PSI
BACK PRESSURE (MAXIMUM) ON OUTLET PORT T	360 PSI





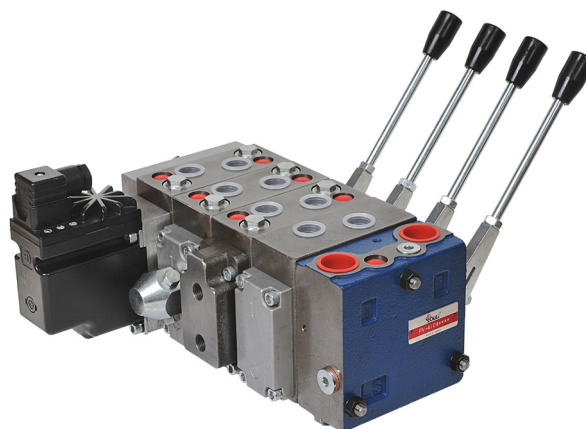
SECTIONAL TYPE

PROPORTIONAL DIRECTIONAL VALVES

QHPV4

- LOAD SENSING PROPORTIONAL FOR FIXED AND VARIABLE DISPLACEMENT PUMPS
- FOR MOBILE & INDUSTRIAL APPLICATION
- FULLY CUSTOMABLE VALVE
- CHOICE OF SPOOLS ESPECIALLY DESIGNED FOR REQUEST FLOW
- LEVERS WITH INDIVIDUAL FLOW ADJUSTMENT SCREWS
- MANY CONTROLS AVAILABLE SUCH AS:
 - SINGLE MANUAL LEVERS
 - ELECTRONIC ON/OFF SIGNAL
 - PROPORTIONNAL ANALOG OR PWM SIGNAL
 - HYDRAULIC & CABLE CONTROLS
 - FRICTION DETENT
- SHOCK AND ANTI-CAVITATION VALVES AVAILABLE
- GREAT CHOICE OF DIFFERENT INLETS

FITS "PVG32"
DANFOSS FOOTPRINT



PART NUMBER	NB OF SPOOL	GPM MAX	PSI MAX	PORTS
QHPV3 OR QHPV4 (CALL US FOR ASSISTANCE)	1 AND +	37	5075	P: SAE-08 & 10 A&B: SAE-10 T: SAE-12

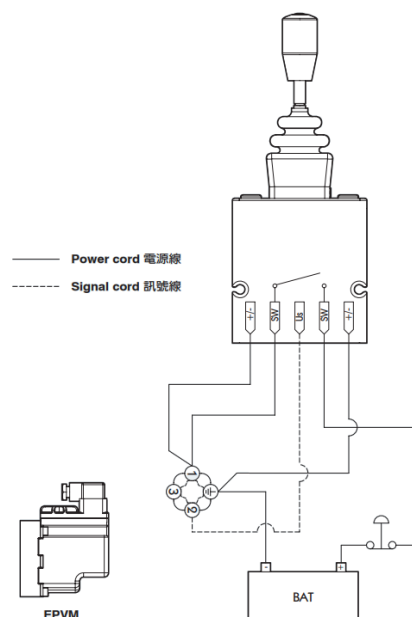
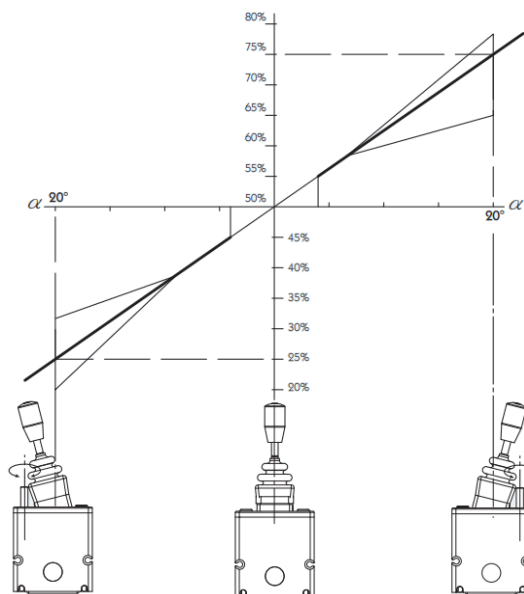
QHPV3

- SAME AS PV4 VALVES. MORE COMPACT SECTIONS

FITS "PVG16"
DANFOSS FOOTPRINT

QHPVH-1 PROPORTIONAL CONTROL

- SINGLE LEVER FOR ONE SECTION OPERATION
- ESPECIALLY DESIGNED TO BE INSTALLED WITH PV4 & PV3 VALVES



INPUT RANGE	11-30VDC
CURRENT CONSUMPTION	100 mA
OUTPUT VOLTAGE	0.25 - 0.75 VDC
NEUTRAL VOLTAGE	0.5 VDC



VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

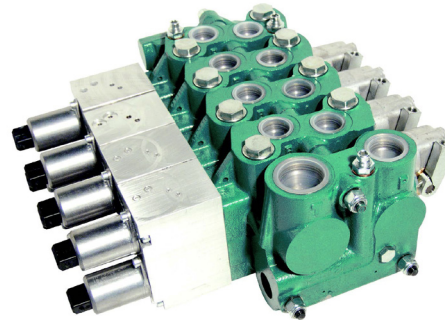
SECTIONAL TYPE



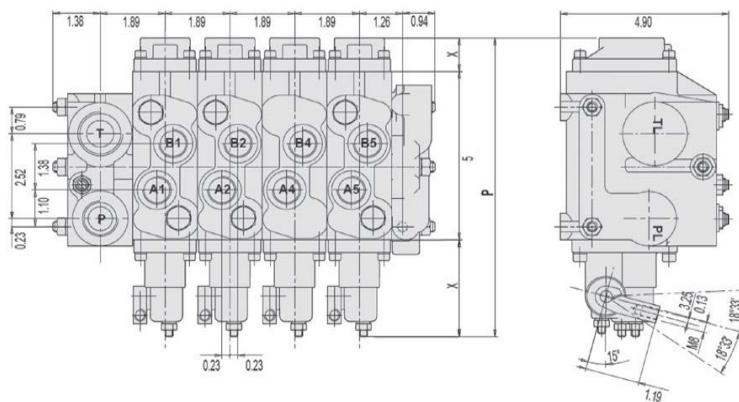
PROPORTIONAL DIRECTIONAL VALVES

QHVDP08 LOAD SENSE VALVES

- FOR FIXED OR VARIABLE DISPLACEMENT PUMP
- MANY SPOOL CONTROLS AVAILABLE SUCH AS
- MANUAL CONTROL
- PNEUMATIC OR HYDRAULIC CONTROL
- ELECTRICAL ON/OFF OR PROPORTIONAL



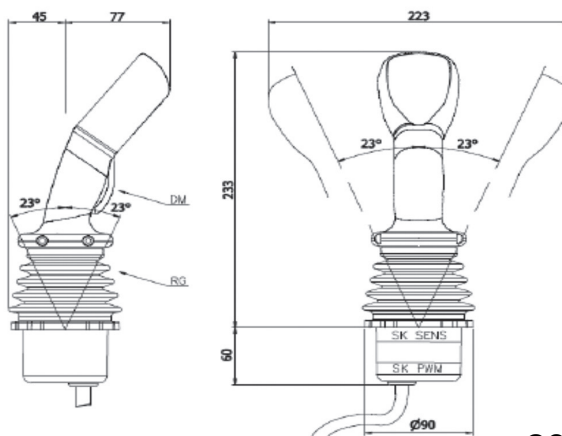
PART NUMBER	NB OF SPOOL	GPM MAX	PSI MAX	PORTS
QHVDP08 (CALL US FOR ASSISTANCE)	1 AND +	34 ON P PORT 25 ON A/B PORT	4500	P: SAE 12 A&B: SAE 10 T: SAE 16 LS: SAE 04



ELECTRONIC PROPORTIONAL PWM CONTROLLED

ELECTRIC SPECIFICATIONS

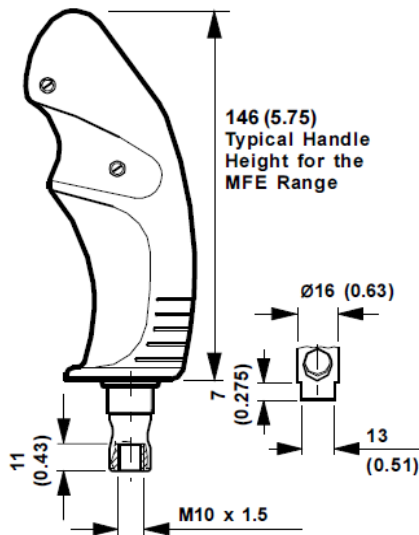
- SUPPLY VOLTAGE: 8-32 VDC
- CURRENT CONSUMPTION @ REST: 250 MA
- SENSOR HALL EFFECT CONTACTLESS TECHNOLOGY
- PWM OUTPUT: 2X DUAL PROPORTIONAL SOLENOID VALVES
- CURRENT OUTPUT RANGE (PWM) FROM 100 TO 1600 MA
- DITHER FREQUENCY: FROM 60 TO 250 HZ (100 HZ FACTORY PRESET)



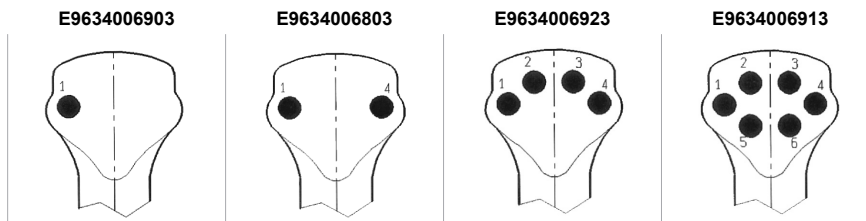


GENERAL SPECIFICATIONS

- POSSIBLE INSERTION OF PUSH BUTTONS: 1, 2, 4, 6.
- PVC CABLES WITH DIAMETER FROM 0.5 MM² AND 256 WIRES FOR CABLE, STANDARD WIRE LENGHT 350 MM FROM THE HANDLE'S BASE.
- CABLES TERMINAL SUPPLIED WITHOUT LEAD-IN WIRE.
- MAX CURRENT ON CONTACTS : 3 AMPERE.
- SAFETY PUSH BUTTON ON REQUEST.
- ELECTRICAL LIFE : 10⁶ CYCLES (1 CYCLE = 2 SEC. "ON" / 2 SEC. OFF WITH CURRENT = 3A VOLTAGE = 12VDC AND WITH ARC SUPPRESSOR DIODE)
10⁶ CYCLES IF USED WITH CURRENT = 3A VOLTAGE = 12VDC AND WITH DIRECT CONNECTION.
- MECHANICAL LIFE : 10⁶ CYCLES.

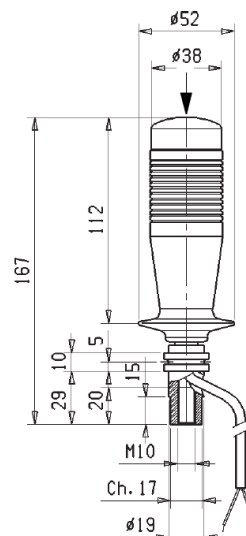


NUMBER OF PUSH BUTTON

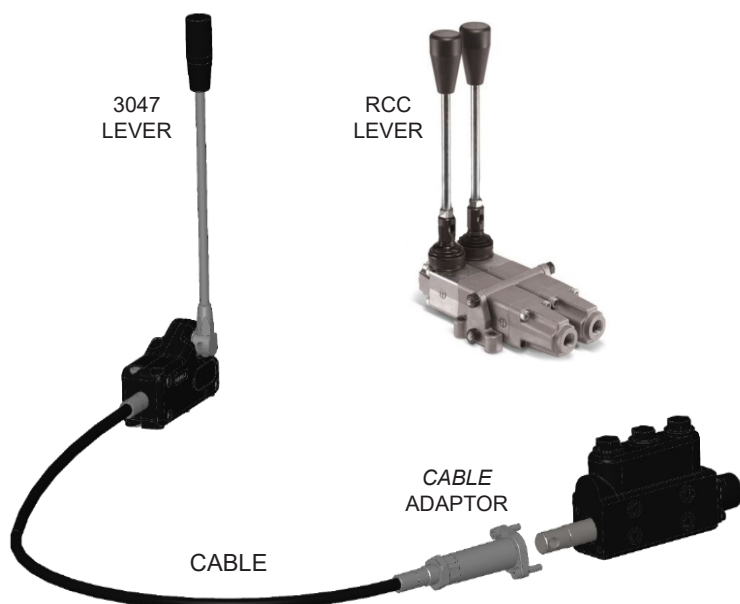


ECONOMIC HANDLES

PART NUMBER	DESCRIPTION
G9466012331	1 CONTACT
G9466012351	2 CONTACTS
E9634005553	2 DETENTS



MADE TO FITS ON HYDRAULIC VALVES



LEVER AND JOYSTICK

PART NO	DESCRIPTION	FITS ON
3047	SINGLE AXIS LEVER	SALAMI, PRINCE
3336	DUAL AXIS JOYSTICK	
RCC3-1S-HL+GC	SINGLE AXIS LEVER MB2 TO MB4	YOULI, WALVOIL
RCC5-1S-HL+GC	SINGLE AXIS LEVER MB5	
FCR-2	DUAL AXIS JOYSTICK	

CABLE ADAPTOR FOR VALVES

PART NO	VALVE MODELS	BRAND
R360T0200	VDM8, VD8A, VDM7	SALAMI
R360T0400	VDM9	
R360T0500	VD10A & VD12A	
R360T0600	VDM6, VD6A, VDM6A	
660170035	V20	PRINCE
660170037	RD500	
YLMB45003	MB2, MB3, MB4 & SD4, SD5	YOULI, WALVOIL
YLMB55003	MB5 & SD11	



CABLES

PART NO	DESCRIPTION	BRAND
IT-3056/01.00	39.4 IN (1 M)	SALAMI, PRINCE
IT-3056/01.50	59.1 IN (1.5 M)	
IT-3056/02.00	78.7 IN (2 M)	
IT-3056/02.50	98.4 IN (2.5 M)	
IT-3056/03.00	118.1 IN (3 M)	
IT-3056/03.50	137.8 IN (3.5 M)	
IT-3056/04.00	157.5 IN (4 M)	
CABLE-1000	39.4 IN (1 M)	YOULI, WALVOIL
CABLE-1500	59.1 IN (1.5 M)	
CABLE-2000	78.7 IN (2 M)	





MORSE TYPE LEVERS

PART NO	DESCRIPTION
3430	SPRING RETURN
3488	WITH DETENT
3461	WITH CENTRAL LOCK KNOB

LONG STROKE LEVERS

PART NO	DESCRIPTION
3472	RACK GEAR

HAND THROTTLE

PART NO	DESCRIPTION
3401	HAND THROTTLE
3408	HAND THROTTLE WITH LEVER

CABLES

PART NO	LENGHT
732491/01.00	39.4 IN (1 M)
732491/02.00	78.7 IN (2 M)
732491/03.00	118.1 IN (3 M)

CABLES (75MM TRAVEL)

PART NO	DESCRIPTION
741715/01.50	59.1 IN (1.5M)
741715/02.00	78.7 IN (2M)
741715/03.00	118.1 IN (3M)

CABLES (80MM TRAVEL)

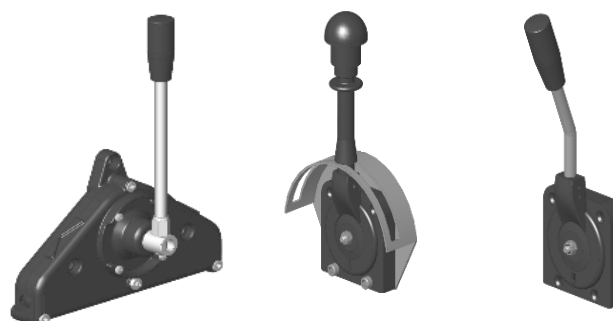
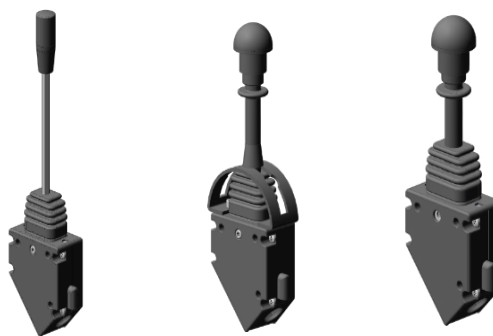
PART NO	DESCRIPTION
732882/01.00	39.4 IN (1M)
732882/02.00	78.7 IN (2M)
732882/03.00	118.1 IN (3M)

PEDAL THROTTLE

PART NO	DESCRIPTION
4021	BULKHEAD MOUNT WITH DETENT, 28MM TRAVEL
208991	FLOOR MOUNT, WITH LEVER, 28MM STROKE

ROCKER PEDALS

PART NO	DESCRIPTION
631368	SINGLE ROCKER, 17MM TRAVEL
631366	DOUBLE ROCKER PEDAL, 14MM TRAVEL





DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

SOLENOID TYPE



CETOP D03 VALVES (ISO NG6)

- INTERCHANGEABLE WITH CETOP AND ISO VALVES ON THE MARKET
- BOLT KIT AND DIN CONNECTORS WITH LED INCLUDED
- CSA, UL AND CE PROOF
- OTHER SPOOL MODELS AND VOLTAGE AVAILAILBLE
- SOFTSHIFT VALVES AVAILABLE



DIN CONN



TERMINAL BOX

MAXIMUM PRESSURE: 4560 PSI
MAXIMUM BACK PRESSURE: 2320 PSI

PART NO	VOLTAGE	MAX GPM @3600 PSI	SPOOL MODEL	MAX GPM @3600 PSI	VOLTAGE	YUKEN PART NO
4WE6-D-6X/ED12-LL	12V DC DIN	18		21	12V DC DIN	DSG01-2B2-D12N
4WE6-D-6X/ED12-BL	12V DC BOX				12V DC BOX	DSG01-2B2-D12
4WE6-D-6X/ED24-LL	24V DC DIN				24V DC DIN	DSG01-2B2-D24N
4WE6-D-6X/ED24-BL	24V DC BOX				24V DC BOX	DSG01-2B2-D24N
4WE6-D-6X/ER110-LL	120V AC DIN				120V AC DIN	DSG01-2B2-A120N
4WE6-D-6X/ER110-BL	120 V AC BOX				120 V AC BOX	DSG01-2B2-A120
4WE6-E-6X/ED12-LL	12V DC DIN	21		26	12V DC DIN	DSG01-3C2-D12N
4WE6-E-6X/ED12-BL	12V DC BOX				12V DC BOX	DSG01-3C2-D12
4WE6-E-6X/ED24-LL	24V DC DIN				24V DC DIN	DSG01-3C2-D24N
4WE6-E-6X/ED24-BL	24V DC BOX				24V DC BOX	DSG01-3C2-D24N
4WE6-E-6X/ER110-LL	120V AC DIN				120V AC DIN	DSG01-3C2-A120N
4WE6-E-6X/ER110-BL	120 V AC BOX				120 V AC BOX	DSG01-3C2-A120
4WE6-H-6X/ED12-LL	12V DC DIN	13		24	12V DC DIN	DSG01-3C3-D12N
4WE6-H-6X/ED12-BL	12V DC BOX				12V DC BOX	DSG01-3C3-D12
4WE6-H-6X/ED24-LL	24V DC DIN				24V DC DIN	DSG01-3C3-D24N
4WE6-H-6X/ED24-BL	24V DC BOX				24V DC BOX	DSG01-3C3-D24N
4WE6-H-6X/ER110-LL	120V AC DIN				120V AC DIN	DSG01-3C3-A120N
4WE6-H-6X/ER110-BL	120 V AC BOX				120 V AC BOX	DSG01-3C3-A120
4WE6-J-6X/ED12-LL	12V DC DIN	21		24	12V DC DIN	DSG01-3C4-D12N
4WE6-J-6X/ED12-BL	12V DC BOX				12V DC BOX	DSG01-3C4-D12
4WE6-J-6X/ED24-LL	24V DC DIN				24V DC DIN	DSG01-3C4-D24N
4WE6-J-6X/ED24-BL	24V DC BOX				24V DC BOX	DSG01-3C4-D24N
4WE6-J-6X/ER110-LL	120V AC DIN				120V AC DIN	DSG01-3C4-A120N
4WE6-J-6X/ER110-BL	120 V AC BOX				120 V AC BOX	DSG01-3C4-A120
4WE6-G-6X/ER12-LL	12V DC DIN	13		10	12V DC DIN	DSG01-3C60-D12N
4WE6-G-6X/ER12-BL	12V DC BOX				12V DC BOX	DSG01-3C60-D12
4WE6-G-6X/ER24-LL	24V DC DIN				24V DC DIN	DSG01-3C60-D24N
4WE6-G-6X/ER24-BL	24V DC BOX				24V DC BOX	DSG01-3C60-D24N
4WE6-G-6X/ER110-LL	120V AC DIN				120V AC DIN	DSG01-3C60-A120N
4WE6-G-6X/ER110-BL	120 V AC BOX				120 V AC BOX	DSG01-3C60-A120

SUBPLATES

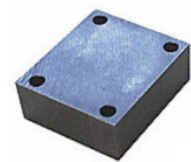
- 10-24 UNC THREADS



PART NO	DESCRIPTION
SPA03-BP-S08	ALU, 3000 PSI, SAE-08, BOTTOM PORTS
SPA03-SB-S08	ALU, 3000 PSI, ALL PORTS ON SIDE. P & T ALSO ON BOTTOM
SPA03-SB-S08-C10-2	SAME AS SPA03-SB-S08 PLUS C10-2 RELIEF CAVITY
DSGM01-X-3090	CAST IRON, 5000 PSI, 1/4 NPT BOTTOM PORTS
DSGM01-Y-3090	CAST IRON, 5000 PSI, 3/8 NPT BOTTOM PORTS

COVER PLATES

- 3000 PSI, ALUMINUM MADE
- BOLT KIT INCLUDED



PART NO	DESCRIPTION
CPA03-XX	ALL PORTS BLOCKED
CPA03-PT	OIL PASSAGE FROM P TO T



DIRECTIONS

VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

SOLENOID TYPE



CETOP D05 VALVES (ISO NG10)

- INTERCHANGEABLE WITH CETOP AND ISO VALVES ON THE MARKET
- BOLT KIT AND DIN CONNECTORS WITH LED INCLUDED
- CSA, UL AND CE PROOF
- OTHER SPOOL MODELS AND VOLTAGE AVAILAILBLE
- SOFTSHIFT VALVES AVAILABLE



DIN CONN



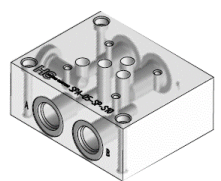
TERMINAL BOX

MAXIMUM PRESSURE: 4560 PSI
MAXIMUM BACK PRESSURE: 2320 PSI

PART NO	VOLTAGE	MAX GPM @3600 PSI	SPOOL MODEL	MAX GPM @3600 PSI	VOLTAGE	YUKEN PART NO
4WE10-D-3X/CD12-LL	12V DC DIN	26		32	12V DC DIN	DSG03-2B2-D12N
4WE10-D-3X/CD12-BL	12V DC BOX				12V DC BOX	DSG03-2B2-D12
4WE10-D-3X/CD24-LL	24V DC DIN				24V DC DIN	DSG03-2B2-D24N
4WE10-D-3X/CD24-BL	24V DC BOX				24V DC BOX	DSG03-2B2-D24N
4WE10-D-3X/CR110-LL	120V AC DIN				120V AC DIN	DSG03-2B2-A120N
4WE10-D-3X/CR110-BL	120 V AC BOX				120 V AC BOX	DSG03-2B2-A120
4WE10-E-3X/CD12-LL	12V DC DIN	32		26	12V DC DIN	DSG03-3C2-D12N
4WE10-E-3X/CD12-BL	12V DC BOX				12V DC BOX	DSG03-3C2-D12
4WE10-E-3X/CD24-LL	24V DC DIN				24V DC DIN	DSG03-3C2-D24N
4WE10-E-3X/CD24-BL	24V DC BOX				24V DC BOX	DSG03-3C2-D24N
4WE10-E-3X/CR110-LL	120V AC DIN				120V AC DIN	DSG03-3C2-A120N
4WE10-E-3X/CR110-BL	120 V AC BOX				120 V AC BOX	DSG03-3C2-A120
4WE10-H-3X/CD12-LL	12V DC DIN	26		24	12V DC DIN	DSG03-3C3-D12N
4WE10-H-3X/CD12-BL	12V DC BOX				12V DC BOX	DSG03-3C3-D12
4WE10-H-3X/CD24-LL	24V DC DIN				24V DC DIN	DSG03-3C3-D24N
4WE10-H-3X/CD24-BL	24V DC BOX				24V DC BOX	DSG03-3C3-D24N
4WE10-H-3X/CR110-LL	120V AC DIN				120V AC DIN	DSG03-3C3-A120N
4WE10-H-3X/CR110-BL	120 V AC BOX				120 V AC BOX	DSG03-3C3-A120
4WE10-J-3X/CD12-LL	12V DC DIN	32		24	12V DC DIN	DSG03-3C4-D12N
4WE10-J-3X/CD12-BL	12V DC BOX				12V DC BOX	DSG03-3C4-D12
4WE10-J-3X/CD24-LL	24V DC DIN				24V DC DIN	DSG03-3C4-D24N
4WE10-J-3X/CD24-BL	24V DC BOX				24V DC BOX	DSG03-3C4-D24N
4WE10-J-3X/CR110-LL	120V AC DIN				120V AC DIN	DSG03-3C4-A120N
4WE10-J-3X/CR110-BL	120 V AC BOX				120 V AC BOX	DSG03-3C4-A120
4WE10-G-3X/CD12-LL	12V DC DIN	21		18	12V DC DIN	DSG03-3C60-D12N
4WE10-G-3X/CD12-BL	12V DC BOX				12V DC BOX	DSG03-3C60-D12
4WE10-G-3X/CD24-LL	24V DC DIN				24V DC DIN	DSG03-3C60-D24N
4WE10-G-3X/CD24-BL	24V DC BOX				24V DC BOX	DSG03-3C60-D24
4WE10-G-3X/CR110-LL	120V AC DIN				120V AC DIN	DSG03-3C60-A120N
4WE10-G-3X/CR110-BL	120 V AC BOX				120 V AC BOX	DSG03-3C60-A120

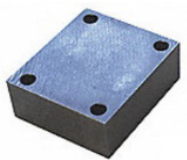
SUBPLATES

- 1/4-20 UNC THREADS



COVER PLATES

- 3000 PSI, ALUMINUM MADE
- BOLT KIT INCLUDED



PART NO	DESCRIPTION
QHSPA05-SP-S10	ALU, 3000 PSI, SAE-10, SIDE PORTS
SPA05-SB-S10-C10-2	ALU, 3000 PSI, SIDE PORTS. P & T ALSO ON BOTTOM, SAE-10 C10-2 RELIEF CAVITY
DSGM03-X-2190	CAST IRON, 5000 PSI, 1/2 NPT, BOTTOM PORTS
DSGM03-Y-2190	CAST IRON, 5000 PSI, 3/4 NPT, BOTTOM PORTS

PART NO	DESCRIPTION
CPA05-XX	ALL PORTS BLOCKED
CPA05-PT	OIL PASSAGE FROM P TO T



VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

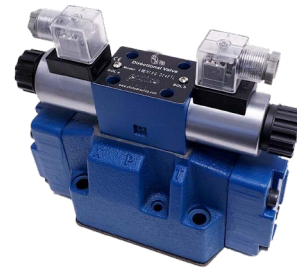
SOLENOID TYPE



CETOP D07 VALVES (ISO NG16)

- INTERCHANGEABLE WITH CETOP AND ISO VALVES ON THE MARKET
- BOLTKIT AND DIN CONNECTORS WITH LED INCLUDED
- CSA, UL AND CE PROOF
- OTHER SPOOL MODELS AND VOLTAGE AVAILAILBLE
- INTERNAL PILOT, EXTERNAL DRAIN SETUP. EASY TO MODIFY

MAXIMUM PRESSURE: 4560 PSI
MAXIMUM BACK PRESSURE: 2320 PSI



PART NO	VOLTAGE	MAX GPM @3600 PSI	SPOOL MODEL	MAX GPM @3600 PSI	VOLTAGE	PART NO
4WEH16-D-D12-E-LL	12V DC DIN	66		79	12V DC DIN	DSHG04-2B2-D12N
4WEH16-D-D12-E-BL	12V DC BOX				12V DC BOX	DSHG04-2B2-D12
4WEH16-D-D24-E-LL	24V DC DIN				24V DC DIN	DSHG04-2B2-D24N
4WEH16-D-D24-E-BL	24V DC BOX				24V DC BOX	DSHG04-2B2-D24N
4WEH16-D-R110-E-LL	120V AC DIN				120V AC DIN	DSHG04-2B2-A120N
4WEH16-D-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG04-2B2-A120
4WEH16-E-D12-E-LL	12V DC DIN	66		53	12V DC DIN	DSHG04-3C2-D12N
4WEH16-E-D12-E-BL	12V DC BOX				12V DC BOX	DSHG04-3C2-D12
4WEH16-E-D24-E-LL	24V DC DIN				24V DC DIN	DSHG04-3C2-D24N
4WEH16-E-D24-E-BL	24V DC BOX				24V DC BOX	DSHG04-3C2-D24N
4WEH16-E-R110-E-LL	120V AC DIN				120V AC DIN	DSHG04-3C2-A120N
4WEH16-E-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG04-3C2-A120
4WEH16-H-D12-E-LL	12V DC DIN	79		79	12V DC DIN	DSHG04-3C3-D12N
4WEH16-H-D12-E-BL	12V DC BOX				12V DC BOX	DSHG04-3C3-D12
4WEH16-H-D24-E-LL	24V DC DIN				24V DC DIN	DSHG04-3C3-D24N
4WEH16-H-D24-E-BL	24V DC BOX				24V DC BOX	DSHG04-3C3-D24N
4WEH16-H-R110-E-LL	120V AC DIN				120V AC DIN	DSHG04-3C3-A120N
4WEH16-H-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG04-3C3-A120
4WEH16-J-D12-E-LL	12V DC DIN	79		66	12V DC DIN	DSHG04-3C4-D12N
4WEH16-J-D12-E-BL	12V DC BOX				12V DC BOX	DSHG04-3C4-D12
4WEH16-J-D24-E-LL	24V DC DIN				24V DC DIN	DSHG04-3C4-D24N
4WEH16-J-D24-E-BL	24V DC BOX				24V DC BOX	DSHG04-3C4-D24N
4WEH16-J-R110-E-LL	120V AC DIN				120V AC DIN	DSHG04-3C4-A120N
4WEH16-J-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG04-3C4-A120
4WEH16-G-D12-E-LL	12V DC DIN	66		79	12V DC DIN	DSHG04-3C60-D12N
4WEH16-G-D12-E-BL	12V DC BOX				12V DC BOX	DSHG04-3C60-D12
4WEH16-G-D24-E-LL	24V DC DIN				24V DC DIN	DSHG04-3C60-D24N
4WEH16-G-D24-E-BL	24V DC BOX				24V DC BOX	DSHG04-3C60-D24N
4WEH16-G-R110-E-LL	120V AC DIN				120V AC DIN	DSHG04-3C60-A120N
4WEH16-G-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG04-3C60-A120

SUBPLATES

- IMPERIAL THREADS

PART NO	DESCRIPTION
SPA07-SP-S16	ALU, 3000 PSI, SAE-16, SIDE PORTS
DHGM-04X-2090	CAST IRON, 5000 PSI, 3/4 NPT, BOTTOM PORTS





VALVES DIRECTIONNELLE / DIRECTIONAL VALVES

SOLENOID TYPE



DIRECTIONS

CETOP D08 VALVES (ISO NG25)

- INTERCHANGEABLE WITH CETOP AND ISO VALVES ON THE MARKET
- BOLT KIT AND DIN CONNECTORS WITH LED INCLUDED
- CSA, UL AND CE PROOF
- OTHER SPOOL MODELS AND VOLTAGE AVAILABLE
- INTERNAL PILOT, EXTERNAL DRAIN SETUP. EASY TO MODIFY



MAXIMUM PRESSURE: 5075 PSI
MAXIMUM BACK PRESSURE: 2320 PSI

PART NO	VOLTAGE	MAX GPM @3600 PSI	SPOOL MODEL	MAX GPM @3600 PSI	VOLTAGE	PART NO
4WEH25-D-D12-E-LL	12V DC DIN	172		132	12V DC DIN	DSHG06-2B2-D12N
4WEH25-D-D12-E-BL	12V DC BOX				12V DC BOX	DSHG06-2B2-D12
4WEH25-D-D24-E-LL	24V DC DIN				24V DC DIN	DSHG06-2B2-D24N
4WEH25-D-D24-E-BL	24V DC BOX				24V DC BOX	DSHG06-2B2-D24N
4WEH25-D-R110-E-LL	120V AC DIN				120V AC DIN	DSHG06-2B2-A120N
4WEH25-D-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG06-2B2-A120
4WEH25-E-D12-E-LL	12V DC DIN	172		132	12V DC DIN	DSHG06-3C2-D12N
4WEH25-E-D12-E-BL	12V DC BOX				12V DC BOX	DSHG06-3C2-D12
4WEH25-E-D24-E-LL	24V DC DIN				24V DC DIN	DSHG06-3C2-D24N
4WEH25-E-D24-E-BL	24V DC BOX				24V DC BOX	DSHG06-3C2-D24N
4WEH25-E-R110-E-LL	120V AC DIN				120V AC DIN	DSHG06-3C2-A120N
4WEH25-E-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG06-3C2-A120
4WEH25-H-D12-E-LL	12V DC DIN	172		122	12V DC DIN	DSHG06-3C3-D12N
4WEH25-H-D12-E-BL	12V DC BOX				12V DC BOX	DSHG06-3C3-D12
4WEH25-H-D24-E-LL	24V DC DIN				24V DC DIN	DSHG06-3C3-D24N
4WEH25-H-D24-E-BL	24V DC BOX				24V DC BOX	DSHG06-3C3-D24N
4WEH25-H-R110-E-LL	120V AC DIN				120V AC DIN	DSHG06-3C3-A120N
4WEH25-H-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG06-3C3-A120
4WEH25-J-D12-E-LL	12V DC DIN	164		132	12V DC DIN	DSHG06-3C4-D12N
4WEH25-J-D12-E-BL	12V DC BOX				12V DC BOX	DSHG06-3C4-D12
4WEH25-J-D24-E-LL	24V DC DIN				24V DC DIN	DSHG06-3C4-D24N
4WEH25-J-D24-E-BL	24V DC BOX				24V DC BOX	DSHG06-3C4-D24N
4WEH25-J-R110-E-LL	120V AC DIN				120V AC DIN	DSHG06-3C4-A120N
4WEH25-J-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG06-3C4-A120
4WEH25-G-D12-E-LL	12V DC DIN	172		90	12V DC DIN	DSHG06-3C60-D12N
4WEH25-G-D12-E-BL	12V DC BOX				12V DC BOX	DSHG06-3C60-D12
4WEH25-G-D24-E-LL	24V DC DIN				24V DC DIN	DSHG06-3C60-D24N
4WEH25-G-D24-E-BL	24V DC BOX				24V DC BOX	DSHG06-3C60-D24N
4WEH25-G-R110-E-LL	120V AC DIN				120V AC DIN	DSHG06-3C60-A120N
4WEH25-G-R110-E-BL	120 V AC BOX				120 V AC BOX	DSHG06-3C60-A120

SUBPLATES

- IMPERIAL THREADS

PART NO	DESCRIPTION
SPA07-SP-S16	ALUMINIUM, 3000 PSI, SAE-20, SIDE PORTS
DHGM-06-5090	CAST IRON, 5000 PSI, 3/4 NPT, BOTTOM PORTS
DHGM-06X-5090	CAST IRON, 5000 PSI, 1 NPT, BOTTOM PORTS





VALVES MODULAIRES / MODULAR VALVES

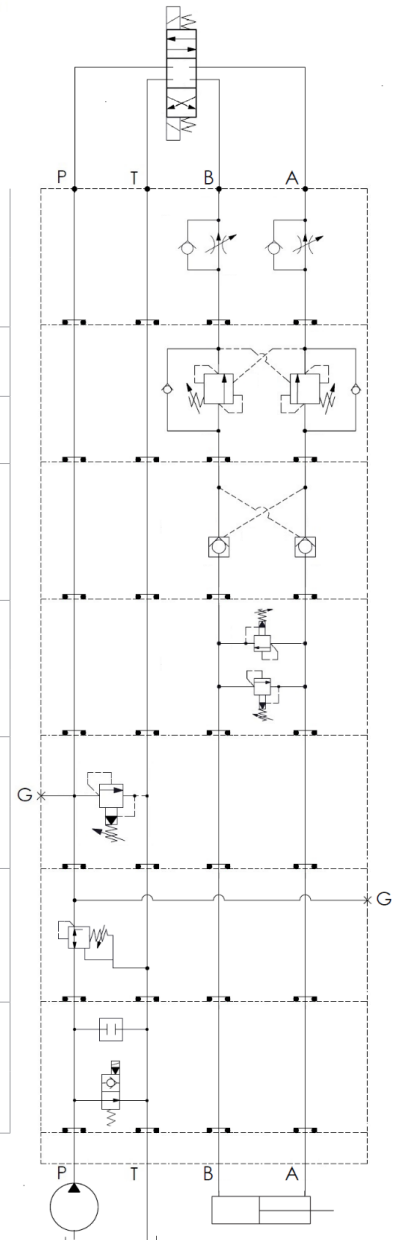
SANDWICH TYPE



VALVES

FUNCTION	PART NUMBER	CETOP	MAX GPM	HEIGHT	PSI RANGE
FLOW CONTROL METER "OUT"	MH03FDO-FR0A-FR0A-A01	D03	10.5	1.75	N/A
	MH05FDO-5A2-5A2-A01	D05	21	1.95	
COUNTERBALANCE VALVE (PILOT RATIO 3:1)	MH03CDW-CB3H-CB3H-A02	D03	10.5	1.75	1000 - 4000
	MH05CDW-CB3H-CB3H-A01	D05	21	1.95	2000 - 5000
LOCK VALVE (PILOT RATIO 3:1)	MH03CDW-CO20-CO20-A02	D03	10.5	1.75	N/A
	MH05CDW-CO20-CO20-A01	D05	21	1.95	
CROSS-OVER RELIEF (A - B)	MH03RDH-RP0A-RP0A-A01	D03	10.5	1.75	100 - 3000
	MH05RDH-RP0A-RP0A-A01	D05	21	1.95	
PRESSURE RELIEF P TO T PORT	MH03RPH-10A2-N02-A01	D03	10.5	1.75	100 - 3000
	MH05RPH-RD5A-N02-A01	D05	21	1.95	
PRESSURE REDUCING ON "P" PORT	MHP03PPW-PD0A-A02	D03	10.5	1.75	100 - 3000
	MHP05PPW-PD0A-A01	D05	21	1.95	
DERIVATIVE CIRCUIT	MH03RPJ-10A2-EP02*	D03	10.5	1.75	N/A
	MH05RPD-CP00-EP02*	D05	21	1.95	

* COIL MUST BE ORDERED SEPARATELY. USES EC04W ON PAGE



BOLT KITS

	PART NUMBER	LENGTH
CETOP D03	MBK01-325	1.57" + DIR. VLV.
	MBK01-350	1.75" + DIR. VLV.
	MBK01-490	1.57" + 1.57" + DIR. VLV.
	MBK01-500	1.57" + 1.75" + DIR. VLV.
	MBK01-525	1.75" + 1.75" + DIR. VLV.

	PART NUMBER	LENGTH
CETOP D05	MBK03-350	1.95" + DIR. VLV.
	MBK03-550	1.95" + 1.95" + DIR. VLV.



EMBASES MULTIPLE / MANIFOLD BLOCKS



DIRECTIONS

- MADE OF ALUMINUM
- 3500 PSI MAXIMUM PRESSURE
- INCLUDES MOUNTING KIT
- C10-2 CAVITY FOR RELIEF
- SAE-06 PRESSURE GAUGE PORT

OPTIONS

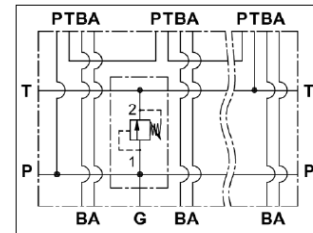
- NPT THREADS
- NUMBER OF STATIONS
- STEEL
- TYPE OF CAVITY FOR RELIEF



CETOP D03 / ISO 06 MANIFOLDS

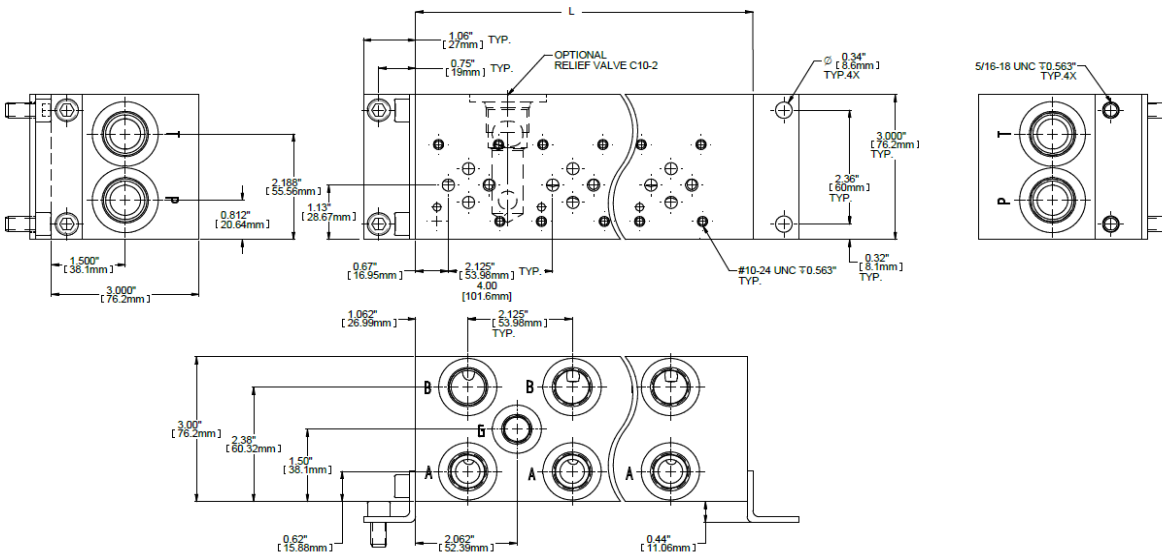
- SERIES CIRCUIT

PART NUMBER	NUMBER OF STATIONS	PORTS		"L"
		P & T	A & B	DIM
BMA03 S02 S08 C10-2	2	SAE-10	SAE-08	4.25
BMA03 S03 S08 C10-2	3			6.37
BMA03 S04 S08 C10-2	4			8.50
BMA03 S05 S08 C10-2	5			10.62
BMA03 S06 S08 C10-2	6			12.75



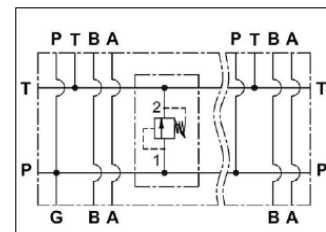
SERIES CIRCUIT WITH
OPTIONAL RELIEF VALVE SHOWN

26-29



- PARALLEL CIRCUIT

PART NUMBER	NUMBER OF STATIONS	PORTS		"L"
		P & T	A & B	DIM
BMA03 P02 S08 C10-2	2	SAE-10	SAE-08	4.25
BMA03 P03 S08 C10-2	3			6.375
BMA03 P04 S08 C10-2	4			8.5
BMA03 P05 S08 C10-2	5			10.63
BMA03 P06 S08 C10-2	6			12.75



PARALLEL CIRCUIT WITH
OPTIONAL RELIEF VALVE SHOWN

- RELIEF & CAVITY PLUG

PART NUMBER	DESCRIPTION
DE-RVP-00-4000	RELIEF 1000-4000 PSI
CAV-PLUG-10-2	CAVITY PLUG





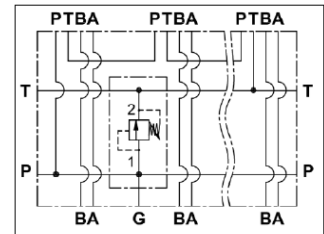
EMBASES MULTIPLE / MANIFOLD BLOCKS



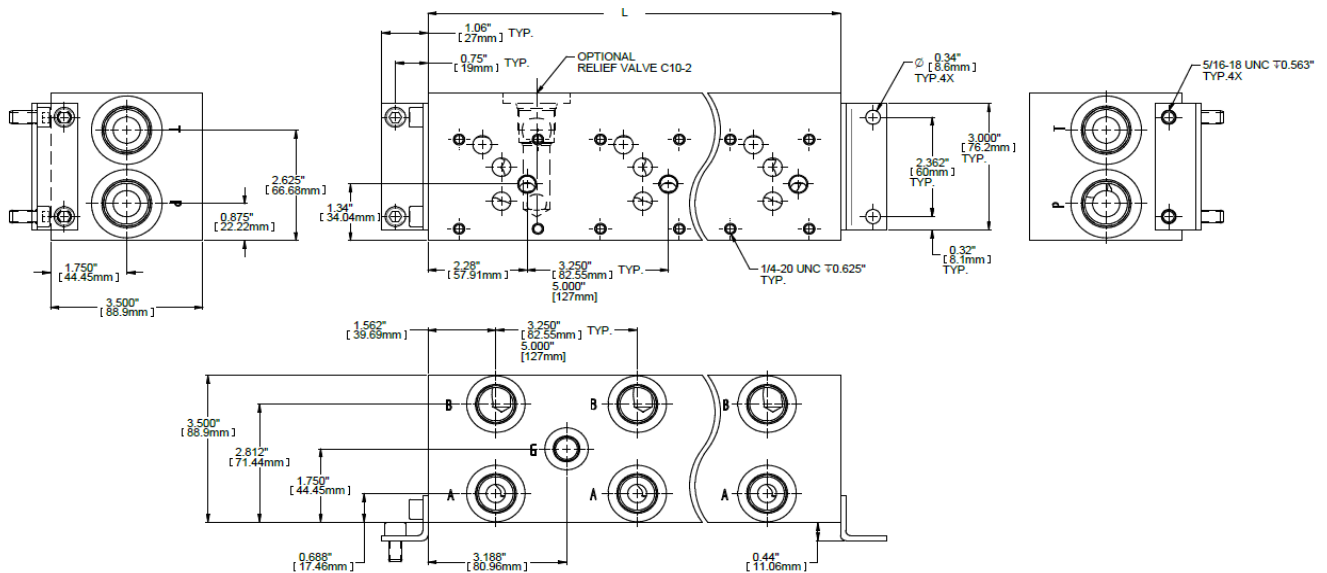
CETOP D05 / ISO 10 MANIFOLDS

- SERIES CIRCUIT

PART NUMBER	NUMBER OF STATIONS	PORTS		"L" DIM
		P & T	A & B	
BMA05 S02 S10 C10-2	2	SAE-12	SAE-10	6.75
BMA05 S03 S10 C10-2	3			9.75
BMA05 S04 S10 C10-2	4			13.00
BMA05 S05 S10 C10-2	5			16.25
BMA05 S06 S10 C10-2	6			19.5

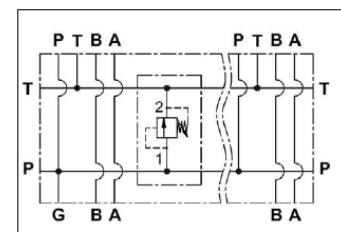


SERIES CIRCUIT WITH
OPTIONAL RELIEF VALVE SHOWN



- PARALLEL CIRCUIT

PART NUMBER	NUMBER OF STATIONS	PORTS		"L" DIM
		P & T	A & B	
BMA05 P02 S10 C10-2	2	SAE-12	SAE-10	6.50
BMA05 P03 S10 C10-2	3			9.75
BMA05 P04 S10 C10-2	4			13.00
BMA05 P05 S10 C10-2	5			16.25
BMA05 P06 S10 C10-2	6			19.5



PARALLEL CIRCUIT WITH
OPTIONAL RELIEF VALVE SHOWN

- RELIEF & CAVITY PLUG

PART NUMBER	DESCRIPTION
DE-RVP-00-4000	RELIEF 1000-4000 PSI
CAV-PLUG-10-2	CAVITY PLUG



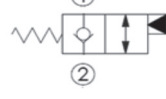
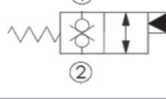
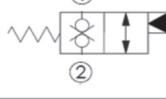


VALVES CARTOUCHE / CARTRIDGE VALVES



DIRECTIONS

2 WAY, 2 POSITIONS, NORMALLY CLOSE

PART NUMBER	MAX GPM	MAX PSI	CAVITY	COIL	CIRCUIT
PB-S2B-00	8	3500	C8-2	P	
EP08W2A05M05	10	5000		EC04W	
DE-S2B-00	15	3500	C10-2	D	
EP10W2A05M05	17.5	5000		EC04W	
TT-S2B-00	25	3000	C12-2	D	
EP12W2A05M05	37.5	5000		EC04W	
SJ-S2B-00	30	3500	C16-2	D	
EP16W2A05M05	37.5	5000		EC04W	
DE-S2I-00	4	3000	C10-2	D	
EP08W2A31M05	10	5000	C8-2	EC04W	
EP10W2A31M05	17.5	5000	C10-2		
EP16W2A31M05	37.5	5000	C16-2		



2 WAY, 2 POSITIONS, NORMALLY OPEN

PART NUMBER	MAX GPM	MAX PSI	CAVITY	COIL	CIRCUIT
PB-S2D-00	10	3500	C8-2	P	
EP08W2A06M05	10	5000		EC04W	
DE-S2D-00	15	3500	C10-2	D	
EP10W2A06M05	17.5	5000		EC04W	
TT-S2D-00	30	3000	C12-2	D	
EP12W2A06M05	37.5	5000		EC04W	
SJ-S2D-00	40	3000	C16-2	D	
EP16W2A06M05	37.5	5000		EC04W	
EP08W2A32M05	10	5000	C8-2	EC04W	
EP10W2A32M05	17.5	5000	C10-2		
EP16W2A31M05	37.5	5000	C16-2		

3 WAY, 2 POSITIONS

PART NUMBER	MAX GPM	MAX PSI	CAVITY	COIL	CIRCUIT
ES08W3A11N04	2.5	3000	C8-3	EC04W	
DF-S3A-00	10	3000	C10-3	D	
TYPICALLY USED FOR SINGLE ACTING CYLINDER					
DF-S3B-00	8	3000	C10-3	D	
TYPICALLY USED AS A SELECTOR					



4 WAY, 2 POSITIONS

PART NUMBER	MAX GPM	MAX PSI	CAVITY	COIL	CIRCUIT
ES08W4A10N04	3	3000	C8-4	EC04W	
DG-S4A-00	10		C10-4	D	
ES08W4A11N04	4	3000	C8-4	EC04W	
DG-S4B-00	10		C10-4	D	



DIRECTIONS

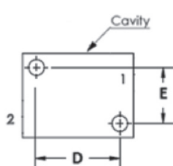
VALVES CARTOUCHE / CARTRIDGE VALVES



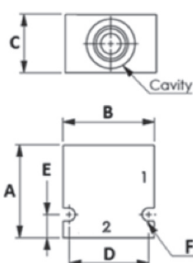
BODIES

- MADE IN ALUMINUM
- 3000 PSI MAXIMUM PRESSURE

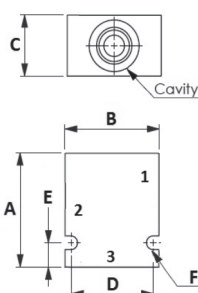
PART NUMBER	CAVITY	PORTS	DIMENSIONS					
			A	B	C	D	E	F
30102466	C8-2	SAE 06	2.0	2.0	1.25	1.50	1.50	1.50
30102359	C10-2	SAE 06	2.12	2.0	1.50	1.75	0.50	0.28
30102364		SAE 08						
30102813	C12-2	SAE 12	3.09	2.75	1.75	2.2	0.84	0.41
30102331	C16-2	SAE 12	3.0	3.0	2.0	2.44	0.75	
30102533	C8-3	SAE 06	2.5	2.25	1.25	1.75	0.25	0.28
30102354	C10-3	SAE 08	2.5	2.5	1.5	2.25	0.38	
30102535	C8-4	SAE 06	3.0	2.25	1.25	1.75	0.50	0.28
30102367	C10-4	SAE 08	3.25	2.5	1.5	2.25	0.38	



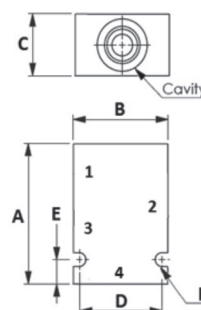
C8-2 BODY



C10-2 TO C16-2 BODIES



C8-3 AND C10-3 BODIES

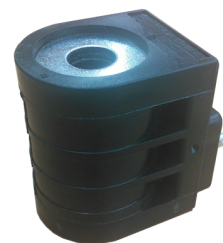


C8-4 AND C10-4 BODIES

COILS

- DIN CONNECTOR MODELS
- OTHER VOLTAGE & TYPE OF CONNECTION AVAILABLE
- LOW POWER CONSUMPTION AVAILABLE. FOR SUBSTANTIAL SAVING.

PART NUMBER	VOLTAGE	WATTS	I. D.	HEIGHT	WIDTH
P-HC-12	12V DC	19	1/2"	1.78	1.25
P-HC-24	24V DC				
P-HC-11	110V AC				
D-HC-12	12V DC	22	1/2"	2.03	1.56
D-HC-24	24V DC				
D-HC-11	110V AC				
L-HC-12	12V DC	22	5/8"	2.03	1.56
L-HC-24	24V DC				
L-HC-11	110V AC				
T-HC-12	12V DC	28	3/4"	1.96	2.38
T-HC-24	24V DC				
T-HC-11	110V AC				
EC04W-200HE	12V DC	20	1/2"	1.41	1.51
EC04W-200HD	24V DC				
EC04W-200HB	110V AC				



DIN CONNECTORS

PART NUMBER	DESCRIPTION
EMM43650A-DC-BLK	NO LED
EMM43650A-110RAC-LED	NO LED , WITH RECTIFIER (AC TO DC)
EMM43650A-DC-LED	WITH LED 12V/ 24V DC/AC
EMM43650A-110AC-LED	WITH LED 110V DC/AC

OTHER CONNECTORS AVAILABLE





DIRECTIONS

DÉVIATEURS ÉLECTRIQUE / ELECTRICAL DIVERTERS

Rexroth
Bosch Group

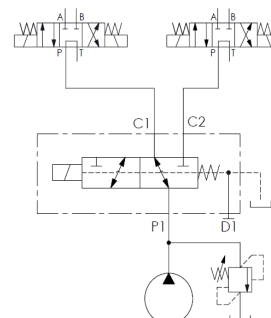
Atlantic
Fluid Tech

3 WAY / 2 POSITIONS

MAX GPM	MAX PSI	PORTS	VOLTAGE	PART NUMBER	CIRCUIT
10.5	3625	SAE-08	12V DC	ES000277	 ES & VS MODELS
			24V DC	ES000212	
16	3625	SAE-08	12V DC	QH85-A-12VDC	
			24V DC	QH85-A-24VDC	
21	3000	SAE-08	12V DC	HVC-3/2-10-N-S08-12	 HVC MODEL
			24V DC	HVC-3/2-10-N-S08-24	
37	3625	SAE-12	12V DC	QH95-A-12VDC	
			24V DC	QH95-A-24VDC	
			24V DC	ES000315	
10.5	3625	SAE-08	12V DC	ES000376	 QH85-D-12VDC QH85-D-24VDC QH95-D-12VDC QH95-D-24VDC
			24V DC	ES000377	
16	3625	SAE-08	12V DC	QH85-D-12VDC	
			24V DC	QH85-D-24VDC	
37	3625	SAE-12	12V DC	QH95-D-12VDC	
			24V DC	QH95-D-24VDC	



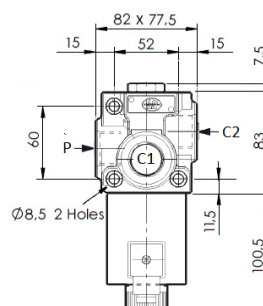
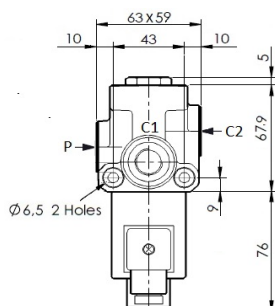
VS 95



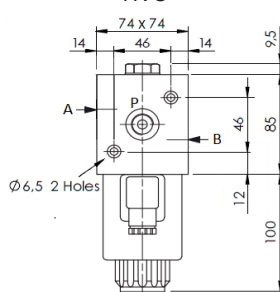
TYPICAL APPLICATION

DIMENSIONS

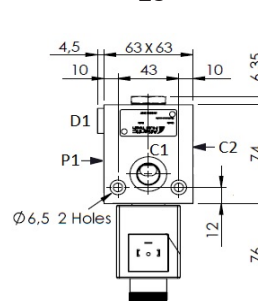
QH85



HVC



ES



COILS

DIN CONNECTOR MODELS

* OTHER VOLTAGE & TYPE OF
CONNECTORS AVAILABLE

PART NUMBER	VOLTAGE	FITS ON
271-0520	12 VDC	QH85, QH155 & QH245F
271-0521	24 VDC	
281-0617	12 VDC	QH95, QH315 & QH285F
281-0618	24 VDC	
AB000167	12 VDC	ES000277 / 312 / 318 / 320 / 376
AB000168	24 VDC	ES000212 / 313 / 319 / 321 / 377
4WE6-12VDC COIL DIN	12 VDC	KVH, 2KVH & MOP
4WE6-24VDC COIL DIN	24 VDC	
4WE10-12VDC COIL DIN	12 VDC	HVC-3/2 & SVK10
4WE10-24VDC COIL DIN	24 VDC	
AB000156	12 VDC	ES000314 / 316
AB000157	24 VDC	ES000315 / 317



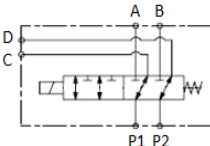
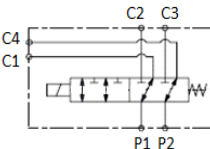
DIRECTIONS

DÉVIATEURS ÉLECTRIQUE / ELECTRICAL DIVERTERS

Rexroth
Bosch Group

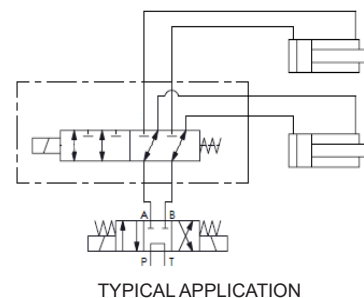
Atlantic
Fluid Tech

6 WAYS / 2 POSITIONS

MAX GPM	MAX PSI	PORTS	VOLTAGE	PART NUMBER	CIRCUIT	
13.5	3625	SAE-08	12V DC	KVH6-S08-DC1200	 KVH MODELS	
				ES000320		
			24V DC	KVH6-S08-DC2400		
				ES000321		
16		12V DC	QH155-12VDC	 ES & QH MODELS		
			24V DC			QH155-34VDC
37		SAE-12	12V DC			ES000316
						QH315-12VDC
	24V DC		ES000317			
			QH315-24VDC			
50	1" BSP	12V DC	QH400-12VDC			
		24V DC	QH400-34VDC			



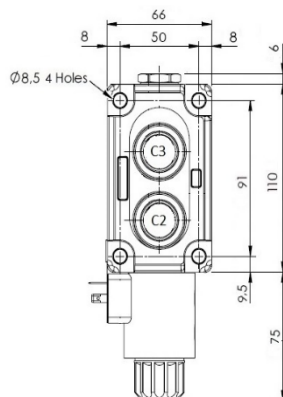
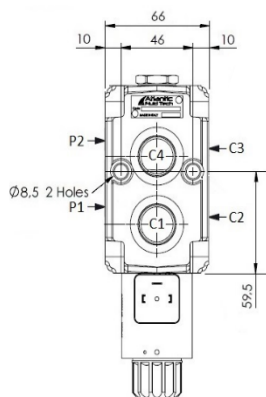
QH 315



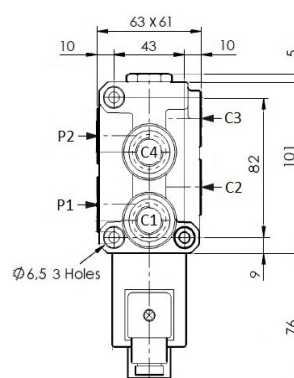
TYPICAL APPLICATION

DIMENSIONS

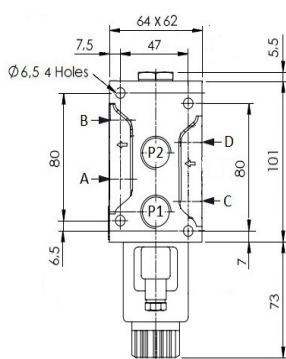
ES320/321



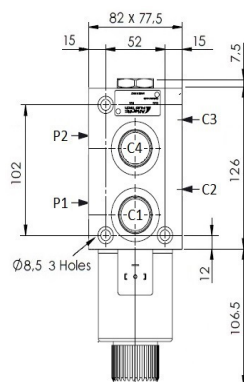
QH155



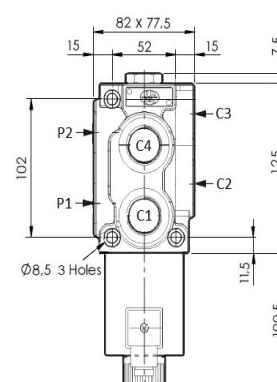
KVH



ES316/317



QH315





DIRECTIONS

DÉVIATEURS ÉLECTRIQUE / ELECTRICAL DIVERTERS

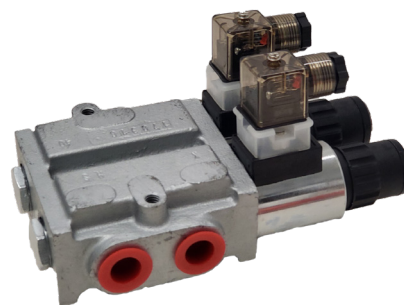
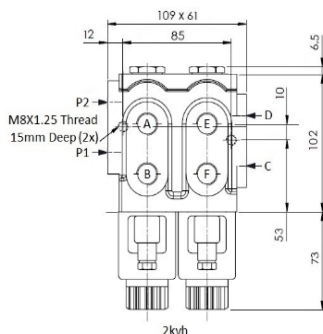
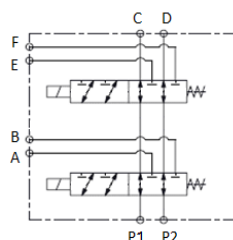
Rexroth
Bosch Group

Atlantic
Fluid Tech

MONOBLOCK 8 WAYS

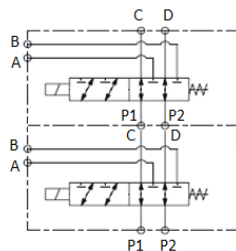
MAX GPM	MAX PSI	PORTS	VOLTAGE	PART NUMBER
13.5	3625	SAE-08	12V DC*	2KVH6-DC12-S08

*24V AVAILABLE FROM STOCK

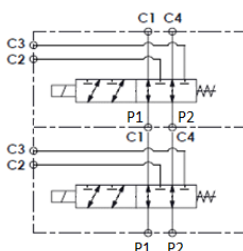


STACKABLE 6 WAYS

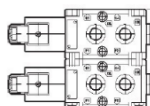
MAX GPM	MAX PSI	PORTS	VOLTAGE	WAYS	PART NUMBER
6.5		SAE-04	12V DC*	6	QH125F-12VDC
13.5	3625	SAE-08	12V DC*	6	MOP066-S08-I1-DC12
				8	MOP066-S08-I2-DC12
					QH245F-12VDC
		SAE-08	12V DC	6	ES000318
			24V DC		ES000319
21		SAE-10	12V DC *	6	SVK10-DC12-S10-N1
24			12V DC*	8	SVK10-DC12-S10-N2
			12V DC		QH285F-12VDC
		SAE-10	12V DC	6	ES000312
			24V DC		ES000313



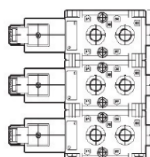
MOP & SKV MODELS
8 WAYS SHOWN



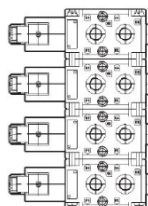
ES & QH MODELS
8 WAYS SHOWN



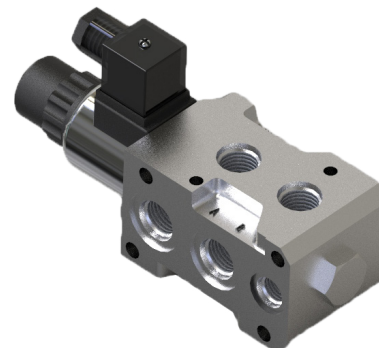
8 ways



10 ways



12 ways





DIRECTIONS

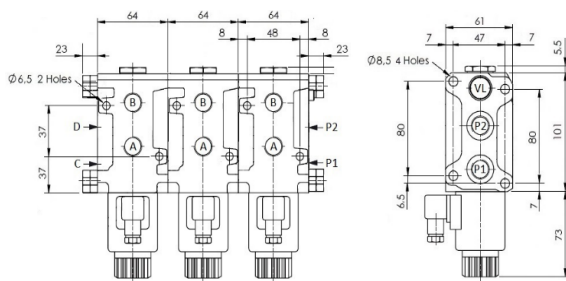
DÉVIATEURS ÉLECTRIQUE / ELECTRICAL DIVERTERS

Rexroth
Bosch Group

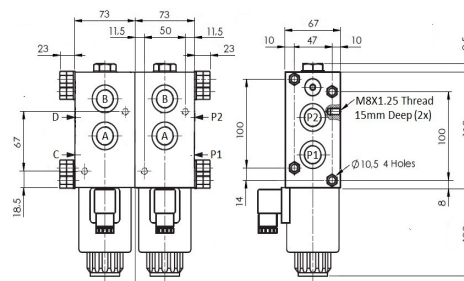
Atlantic
Fluid Tech

DIMENSIONS

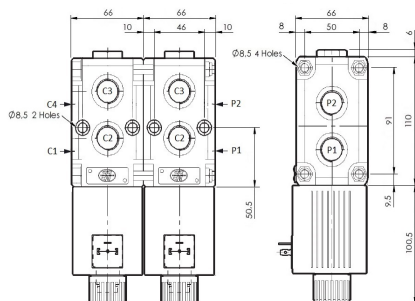
SKV 8 WAYS



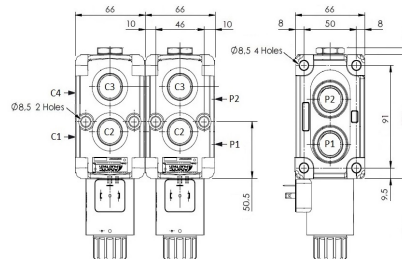
MOP 10 WAYS



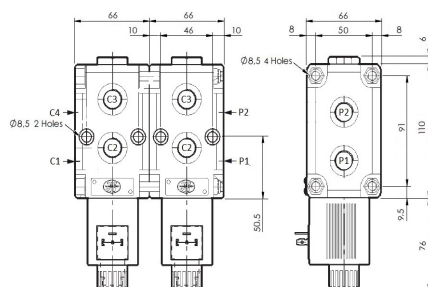
QH285F 8 WAYS



ES 8 WAYS



QH245F 8 WAYS





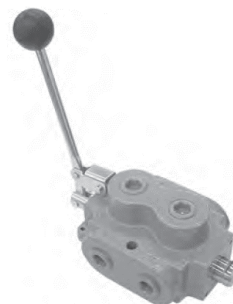
DÉVIATEURS MANUELS / MANUAL DIVERTERS



3 WAYS PUSH-PULL DIVERTERS

- 2500 PSI MAXIMUM PRESSURE
- 20 GPM MAXIMUM FLOW
- LEVER HANDLE, END CAP KIT ALSO AVAILABLE

PART NUMBER	PORTS
SS-2A1D	1/2 NPT
SS-3A1D	SAE 08



6 WAYS PUSH-PULL DIVERTERS

- 2500 PSI MAXIMUM PRESSURE
- KNOB, SPRING OFFSET, ENDCAP AVAILABLE

PART NUMBER	MAX GPM	PORTS
DS-1A1E	20	1/2 NPT
DS-3A1E		SAE-10
DS-4A1E	40	3/4 NPT
DS-5A1E		SAE-12

DOUBLE - 6 WAYS

- 3600 PSI MAXIMUM PRESSURE
- 13 GPM MAXIMUM FLOW:
- 2 POSITIONS DETENDED
- PORTS: SAE 08

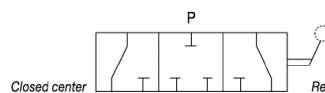
PART NUMBER	DESCRIPTION	DESCRIPTION
DF06/6-A-S		OPEN CENTER IN TRANSITION
DF06/6-C-S		CLOSED CENTER IN TRANSITION



3 WAYS ROTARY DIVERTERS

- CLOSED TRANSITION
- OPEN TRANSITION ALSO AVAILABLE

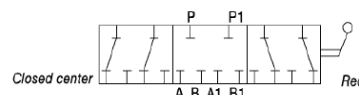
PART NUMBER	MAX PSI	MAX GPM	PORTS
FD3W-01-C-S	5075	8	SAE-06
FD3W-02-C-S	4560	16	SAE-08
FD3W-03-C-S	4060	24	SAE-10
FD3W-04-C-S	3625	32	SAE-12
FD3W-05-C-S	3200	48	SAE-16



6 WAYS ROTARY FLOW DIVERTERS

- CLOSED TRANSITION
- OPEN TRANSITION ALSO AVAILABLE

PART NUMBER	MAX PSI	MAX GPM	PORTS
FD6W-01-C-S	5075	8	SAE-06
FD6W-02-C-S	4560	16	SAE-08
FD6W-03-C-S	4060	24	SAE-10
FD6W-04-C-S	3625	32	SAE-12
FD6W-05-C-S	3200	48	SAE-16



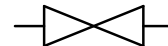


DIRECTIONS

ROBINETS A BILLE 2 VOIES / 2 WAY BALL VALVES



CARBON STEEL

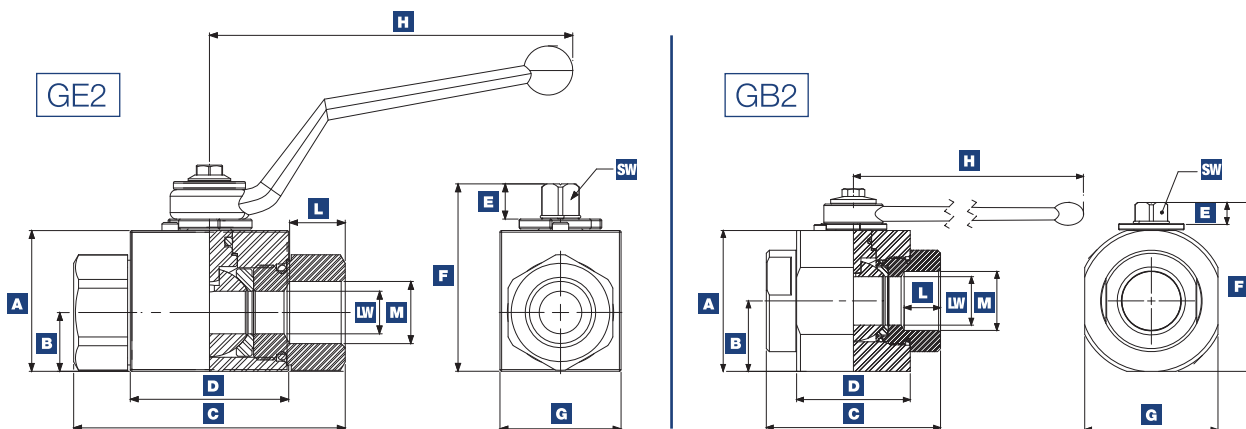


SPECIFICATIONS

Body	Carbon steel
Ball	Carbon steel
Temperature Range	-4°F to 212°F (depending on seal material selected)
Ball Seats	Delrin (Standard) POM, PEEK PA612, GEMPTFE, PTFE (Optional)
O-Rings	Buna N (Standard) FKM, EPDM, MVQ (Optional)

GE2 / GB2 CARBON

DIMENSIONS



Model	Size	A	B	C	D	E	F	G	H	L	M	SW	LW
Full Bore	1/4"	1.38"	0.57"	2.80"	1.67"	0.43"	1.93"	1.18"	4.33"	0.67"	1/4"	0.35"	0.24"
	3/8"	1.57"	0.69"	2.87"	1.75"	0.43"	2.14"	1.38"	4.33"	0.67"	3/8"	0.35"	0.39"
	1/2"	1.69"	0.71"	3.27"	1.91"	0.43"	2.24"	1.46"	4.33"	0.83"	1/2"	0.35"	0.51"
	3/4"	2.17"	0.92"	3.74"	2.46"	0.55"	2.89"	1.77"	7.09"	0.83"	3/4"	0.55"	0.79"
	1"	2.56"	1.16"	4.41"	2.62"	0.55"	3.29"	2.17"	7.09"	0.94"	1"	0.55"	0.98"
Reduced Bore	1-1/4"	2.56"	1.16"	4.72"	2.62"	0.55"	3.29"	2.17"	7.09"	0.94"	1-1/4"	0.55"	0.98"
	1-1/2"	2.56"	1.16"	4.88"	2.62"	0.55"	3.29"	2.17"	7.09"	0.94"	1-1/2"	0.55"	0.98"
Full Bore	1-1/4"	3.66"	1.83"	4.53"	2.95"	0.53"	4.39"	3.46"	11.81"	0.94"	1-1/4"	0.67"	1.26"
	1-1/2"	4.21"	2.11"	5.16"	3.35"	0.53"	4.94"	4.02"	11.81"	0.98"	1-1/2"	0.67"	1.57"
	2"	4.49"	2.24"	5.51"	3.86"	0.53"	5.22"	4.65"	11.81"	1.06"	2"	0.67"	1.97"

CODE INFORMATION

Model	Part #	Ports	Part #	Ports	Working Pressure	Weight	Locking Kit Part #
Full Bore	GE2 N 1/4"	1/4" NPT	GE2 SAE4	SAE-4	7250 PSI	1.00 lb	GE-LK-6
	GE2 N 3/8"	3/8" NPT	GE2 SAE6	SAE-6	7250 PSI	1.25 lb	GE-LK-6
	GE2 N 1/2"	1/2" NPT	GE2 SAE8	SAE-8	7250 PSI	1.61 lb	GE-LK-6
	GE2 N 3/4"	3/4" NPT	GE2 SAE12	SAE-12	5800 PSI	3.00 lb	GE-LK-20
	GE2 N 1"	1" NPT	GE2 SAE16	SAE-16	5075 PSI	4.80 lb	GE-LK-20
Reduced Bore	GE2 N 1-1/4" R	1-1/4" NPT	GE2 SAE20	SAE-20	5075 PSI	5.25 lb	GE-LK-20
	GE2 N 1-1/2" R	1-1/2" NPT	GE2 SAE24	SAE-24	5075 PSI	5.25 lb	GE-LK-20
Full Bore	GB2 N 1-1/4"	1-1/4" NPT	GB2 SAE20	SAE-20	5075 PSI	8.25 lb	GB-LK
	GB2 N 1-1/2"	1-1/2" NPT	GB2 SAE24	SAE-24	5075 PSI	12.75 lb	GB-LK
	GB2 N 2"	2" NPT	GB2 SAE32	SAE-32	5075 PSI	14.25 lb	GB-LK

Additional options are available.



DIRECTIONS

ROBINETS A BILLE 2 VOIES / 2 WAY BALL VALVES



STAINLESS STEEL

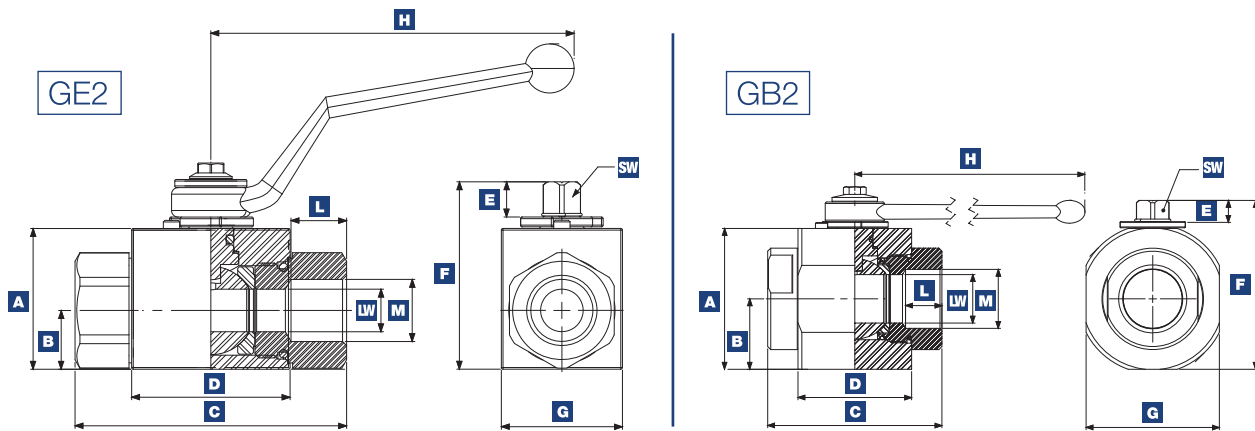


SPECIFICATIONS

Body	Stainless steel
Ball	Stainless steel
Temperature Range	-76°F to 446° (depending on seal material selected)
Ball Seats	Delrin (Standard) POM, PEEK PA612, GEMPTFE, PTFE (Optional)
O-Rings	Buna N (Standard) FKM, EPDM, MVQ (Optional)

GE2 / GB2 STAINLESS

DIMENSIONS



Model	Size	A	B	C	D	E	F	G	H	L	M	SW	LW
Full Bore	1/4"	1.38"	0.57"	2.80"	1.67"	0.43"	1.93"	1.18"	4.33"	0.67"	1/4"	0.35"	0.24"
	3/8"	1.57"	0.69"	2.87"	1.75"	0.43"	2.14"	1.38"	4.33"	0.67"	3/8"	0.35"	0.39"
	1/2"	1.69"	0.71"	3.27"	1.91"	0.43"	2.24"	1.46"	4.33"	0.83"	1/2"	0.35"	0.51"
	3/4"	2.17"	0.92"	3.74"	2.46"	0.55"	2.89"	1.77"	7.09"	0.83"	3/4"	0.55"	0.79"
	1"	2.56"	1.16"	4.41"	2.62"	0.55"	3.29"	2.17"	7.09"	0.94"	1"	0.55"	0.98"
Reduced Bore	1-1/4"	2.56"	1.16"	4.72"	2.62"	0.55"	3.29"	2.17"	7.09"	0.94"	1-1/4"	0.55"	0.98"
	1-1/2"	2.56"	1.16"	4.88"	2.62"	0.55"	3.29"	2.17"	7.09"	0.94"	1-1/2"	0.55"	0.98"
Full Bore	1-1/4"	3.66"	1.83"	4.53"	2.95"	0.53"	4.39"	3.46"	11.81"	0.94"	1-1/4"	0.67"	1.26"
	1-1/2"	4.21"	2.11"	5.16"	3.35"	0.53"	4.94"	4.02"	11.81"	0.98"	1-1/2"	0.67"	1.57"
	2"	4.49"	2.24"	5.51"	3.86"	0.53"	5.22"	4.65"	11.81"	1.06"	2"	0.67"	1.97"

CODE INFORMATION

Model	Part #	Ports	Part #	Ports	Working Pressure	Weight	Locking Kit Part #
Full Bore	GE2 N 1/4"-4444-SS	1/4" NPT	GE2 SAE4-4444-SS	SAE-4	7250 PSI	1.00 lb	GE-LK-6
	GE2 N 3/8"-4444-SS	3/8" NPT	GE2 SAE6-4444-SS	SAE-6	7250 PSI	1.25 lb	GE-LK-6
	GE2 N 1/2"-4444-SS	1/2" NPT	GE2 SAE8-4444-SS	SAE-8	7250 PSI	1.61 lb	GE-LK-6
	GE2 N 3/4"-4444-SS	3/4" NPT	GE2 SAE12-4444-SS	SAE-12	5800 PSI	3.00 lb	GE-LK-20
	GE2 N 1"-4444-SS	1" NPT	GE2 SAE16-4444-SS	SAE-16	5075 PSI	4.80 lb	GE-LK-20
Reduced Bore	GE2 N 1-1/4" R-4444-SS	1-1/4" NPT	GE2 SAE20-4444-SS	SAE-20	5075 PSI	5.25 lb	GE-LK-20
	GE2 N 1-1/2" R-4444-SS	1-1/2" NPT	GE2 SAE24-4444-SS	SAE-24	5075 PSI	5.25 lb	GE-LK-20
Full Bore	GB2 N 1-1/4"-4444-SS	1-1/4" NPT	GB2 SAE20-4444-SS	SAE-20	5075 PSI	8.25 lb	GB-LK
	GB2 N 1-1/2"-4444-SS	1-1/2" NPT	GB2 SAE24-4444-SS	SAE-24	5075 PSI	12.75 lb	GB-LK
	GB2 N 2"-4444-SS	2" NPT	GB2 SAE32-4444-SS	SAE-32	5075 PSI	14.25 lb	GB-LK

Additional options are available.

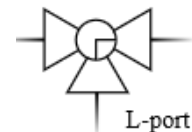


DIRECTIONS

ROBINETS A BILLE 3 VOIES/ 3 WAY BALL VALVES



CARBON STEEL

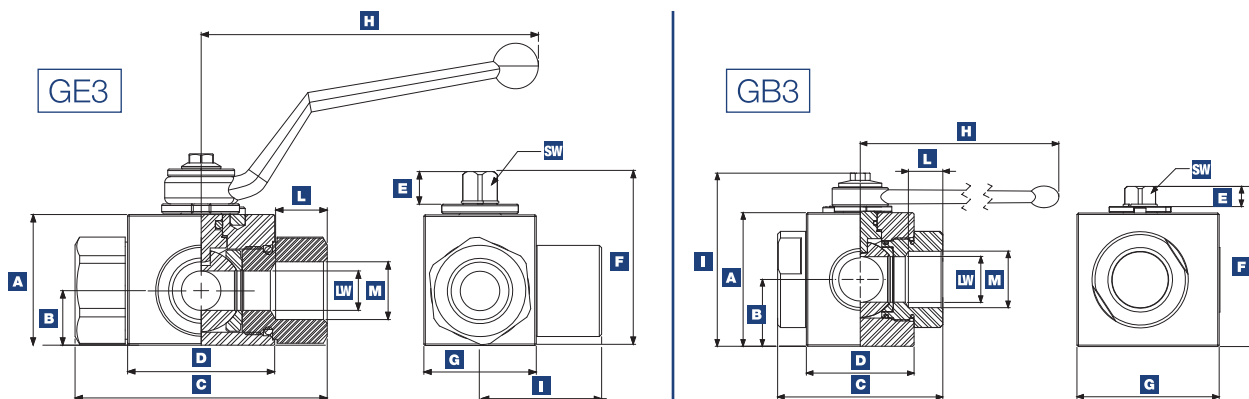


GE3 / GB3 CARBON

SPECIFICATIONS

Body	Carbon steel
Ball	Carbon steel
Temperature Range	-4°F to 212° (depending on seal material selected) Delrin (Standard)
Ball Seats	POM, PEEK PA612, GEMPTFE, PTFE (Optional)
O-Rings	Buna N (Standard) FKM, EPDM, MVQ (Optional)

DIMENSIONS



Model	Size	A	B	C	D	E	F	G	H	I	L	M	SW	LW
Full Bore	1/4"	1.38"	0.57"	2.80"	1.67"	0.43"	1.93"	1.18"	4.33"	3.60"	0.67"	1/4"	0.35"	0.24"
	3/8"	1.57"	0.69"	2.87"	1.75"	0.43"	2.14"	1.38"	4.33"	3.80"	0.67"	3/8"	0.35"	0.39"
	1/2"	1.69"	0.71"	3.27"	1.91"	0.43"	2.24"	1.46"	4.33"	3.92"	0.83"	1/2"	0.35"	0.51"
	3/4"	2.17"	0.92"	3.74"	2.46"	0.55"	2.89"	1.77"	7.09"	4.19"	0.83"	3/4"	0.55"	0.79"
	1"	2.56"	1.16"	4.41"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	0.94"	1"	0.55"	0.98"
Reduced Bore	1-1/4"	2.56"	1.16"	4.72"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	0.94"	1-1/4"	0.55"	0.98"
Full Bore	1-1/4"	3.66"	1.83"	4.53"	2.95"	0.53"	4.39"	3.90"	11.81"	4.74"	0.94"	1-1/4"	0.67"	1.26"
	1-1/2"	4.21"	2.11"	5.16"	3.35"	0.53"	4.94"	4.53"	11.81"	5.30"	0.98"	1-1/2"	0.67"	1.57"
	2"	4.49"	2.24"	5.51"	3.86"	0.53"	5.22"	5.04"	11.81"	5.57"	1.06"	2"	0.67"	1.97"

CODE INFORMATION

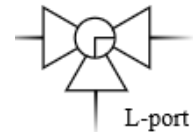
Model	Part #	Ports	Part #	Ports	Working Pressure	Weight	Locking Kit Part #
Full Bore	GE3 N 1/4"	1/4" NPT	GE3 SAE4	SAE-4	5800 PSI	1.00 lb	GE-LK-6
	GE3 N 3/8"	3/8" NPT	GE3 SAE6	SAE-6	5800 PSI	1.25 lb	GE-LK-6
	GE3 N 1/2"	1/2" NPT	GE3 SAE8	SAE-8	5075 PSI	1.61 lb	GE-LK-6
	GE3 N 3/4"	3/4" NPT	GE3 SAE12	SAE-12	5075 PSI	3.00 lb	GE-LK-20
	GE3 N 1"	1" NPT	GE3 SAE16	SAE-16	5075 PSI	4.80 lb	GE-LK-20
Reduced Bore	GE3 N 1-1/4" R	1-1/4"NPT	GE3 SAE20	SAE-20	5075 PSI	5.25 lb	GE-LK-20
Full Bore	GB3 N 1-1/4"	1-1/4" NPT	N/A	N/A	5075 PSI	8.25 lb	GB-LK
	GB3 N 1-1/2"	1-1/2" NPT	N/A	N/A	5075 PSI	12.75 lb	GB-LK
	GB3 N 2"	2" NPT	N/A	N/A	5075 PSI	14.25 lb	GB-LK



DIRECTIONS

ROBINETS A BILLE 3 VOIES/ 3 WAY BALL VALVES

STAINLESS STEEL

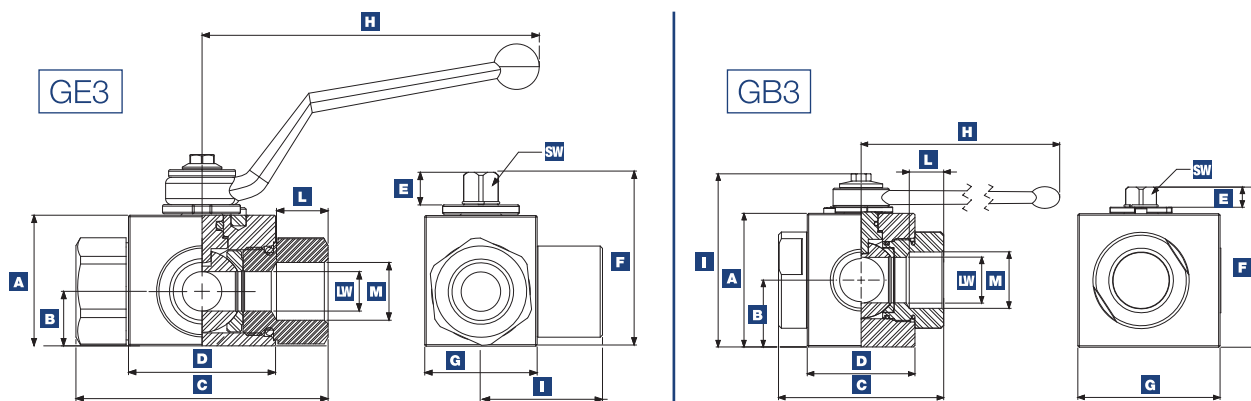


SPECIFICATIONS

Body	Stainless steel
Ball	Stainless steel
Temperature Range	-76°F to 446°F (depending on seal material selected)
Ball Seats	Delrin (Standard) POM, PEEK PA612, GEMPTFE, PTFE (Optional)
O-Rings	Buna N (Standard) FKM, EPDM, MVQ (Optional)

GE3 / GB3 STAINLESS

DIMENSIONS



Model	Size	A	B	C	D	E	F	G	H	I	L	M	SW	LW
Full Bore	1/4"	1.38"	0.57"	2.80"	1.67"	0.43"	1.93"	1.18"	4.33"	3.60"	0.67"	1/4"	0.35"	0.24"
	3/8"	1.57"	0.69"	2.87"	1.75"	0.43"	2.14"	1.38"	4.33"	3.80"	0.67"	3/8"	0.35"	0.39"
	1/2"	1.69"	0.71"	3.27"	1.91"	0.43"	2.24"	1.46"	4.33"	3.92"	0.83"	1/2"	0.35"	0.51"
	3/4"	2.17"	0.92"	3.74"	2.46"	0.55"	2.89"	1.77"	7.09"	4.19"	0.83"	3/4"	0.55"	0.79"
	1"	2.56"	1.16"	4.41"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	0.94"	1"	0.55"	0.98"
Reduced Bore	1-1/4"	2.56"	1.16"	4.72"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	0.94"	1-1/4"	0.55"	0.98"
Full Bore	1-1/4"	3.66"	1.83"	4.53"	2.95"	0.53"	4.39"	3.90"	11.81"	4.74"	0.94"	1-1/4"	0.67"	1.26"
	1-1/2"	4.21"	2.11"	5.16"	3.35"	0.53"	4.94"	4.53"	11.81"	5.30"	0.98"	1-1/2"	0.67"	1.57"
	2"	4.49"	2.24"	5.51"	3.86"	0.53"	5.22"	5.04"	11.81"	5.57"	1.06"	2"	0.67"	1.97"

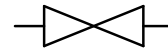
CODE INFORMATION

Model	Part #	Ports	Part #	Ports	Working Pressure	Weight	Locking Kit Part #
Full Bore	GE3 N 1/4"-4444-SS	1/4" NPT	GE3 SAE4-4444-SS	SAE-4	5800 PSI	1.00 lb	GE-LK-6
	GE3 N 3/8"-4444-SS	3/8" NPT	GE3 SAE6-4444-SS	SAE-6	5800 PSI	1.25 lb	GE-LK-6
	GE3 N 1/2"-4444-SS	1/2" NPT	GE3 SAE8-4444-SS	SAE-8	5075 PSI	1.61 lb	GE-LK-6
	GE3 N 3/4"-4444-SS	3/4" NPT	GE3 SAE12-4444-SS	SAE-12	5075 PSI	3.00 lb	GE-LK-20
	GE3 N 1"-4444-SS	1" NPT	GE3 SAE16-4444-SS	SAE-16	5075 PSI	4.80 lb	GE-LK-20
Reduced Bore	GE3 N 1-1/4" R-4444-SS	1-1/4" NPT	GE3 SAE20-4444-SS	SAE-20	5075 PSI	5.25 lb	GE-LK-20
Full Bore	GB3 N 1-1/4"-4444-SS	1-1/4" NPT	N/A	N/A	5075 PSI	8.25 lb	GB-LK
	GB3 N 1-1/2"-4444-SS	1-1/2" NPT	N/A	N/A	5075 PSI	12.75 lb	GB-LK
	GB3 N 2"-4444-SS	2" NPT	N/A	N/A	5075 PSI	14.25 lb	GB-LK



DIRECTIONS

ROBINETS A BILLE 2 VOIES / 2 WAY BALL VALVES



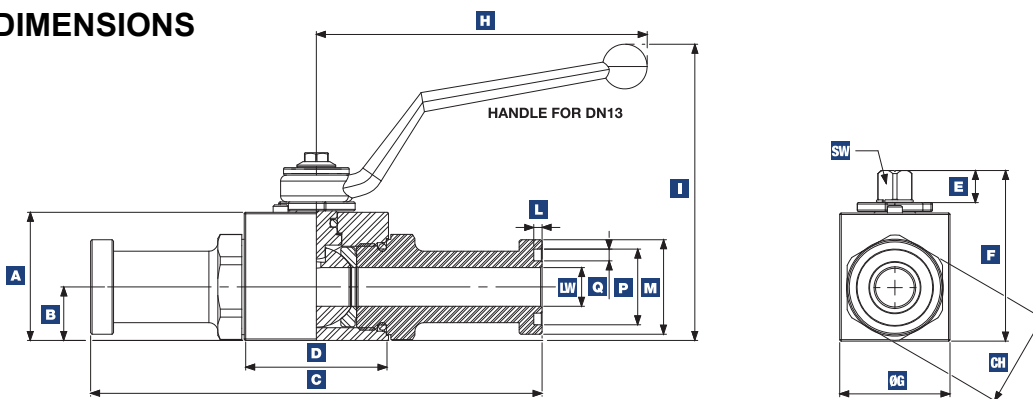
CARBON STEEL



SPECIFICATIONS

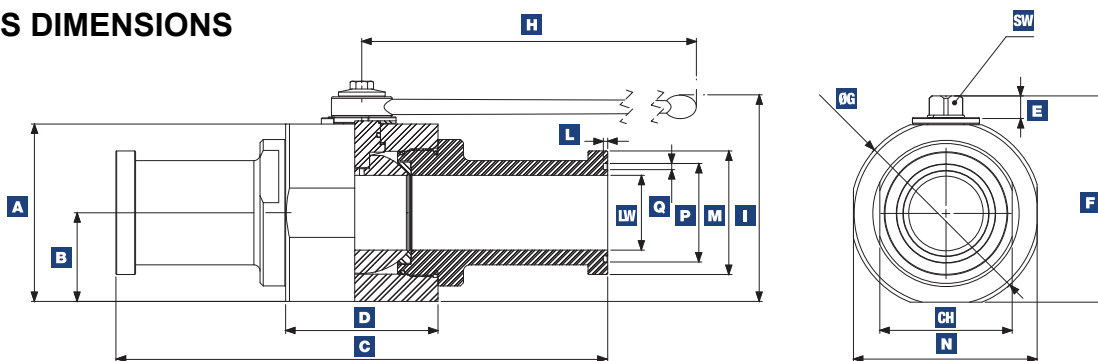
Body	Carbon steel
Ball	Carbon steel
Temperature Range	-4°F to 212° (depending on seal material selected) Delrin
Ball Seats	(Standard) POM, PEEK PA612, GEMPTFE, PTFE (Optional)
O-Rings	Buna N (Standard) FKM, EPDM, MVQ (Optional)

GES DIMENSIONS



Model	PN	A	B	C	D	E	F	G	H	I	L	M	CH	P	Q	SW	LW	Weight
GES-3 DN13 1/2"	5000 Psi	1.69"	0.71"	5.96"	1.91"	0.43"	2.24"	1.46"	4.33"	3.92"	0.11"	1.19"	1.26"	1"	0.16"	0.35"	0.51"	2.12 lb
GES-3 DN20 3/4"	5000 Psi	2.17"	0.92"	6.38"	2.46"	0.55"	2.89"	1.77"	7.09"	4.19"	0.11"	1.50"	1.61"	1.25"	0.16"	0.55"	0.79"	3.79 lb
GES-3 DN25 1"	5000 Psi	2.56"	1.16"	7.01"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	0.11"	1.75"	1.97"	1.54"	0.16"	0.55"	0.98"	5.73 lb
GES-6 DN13 1/2"	6000 Psi	1.69"	0.71"	5.96"	1.91"	0.43"	2.24"	1.46"	4.33"	3.92"	0.11"	1.24"	1.26"	1"	0.16"	0.35"	0.51"	2.12 lb
GES-6 DN20 3/4"	5800 Psi	2.17"	0.92"	6.85"	2.46"	0.55"	2.89"	1.77"	7.09"	4.19"	0.11"	1.63"	1.61"	1.25"	0.16"	0.55"	0.79"	3.95 lb
GES-6 DN25 1"	5000 Psi	2.56"	1.16"	7.80"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	0.11"	1.88"	1.97"	1.54"	0.16"	0.55"	0.98"	6.08 lb

GBS DIMENSIONS



Model	PN	A	B	C	D	E	F	ØG	H	I	L	M	N	CH	P	Q	SW	LW	Weight
GBS-3 DN32 1 1/4"	4000 Psi	3.66"	1.83"	7.50"	2.95"	0.53"	4.39"	3.86"	11.81"	4.74"	0.11"	2.00"	3.46"	2.36"	1.75"	0.16"	0.67"	1.26"	11.97 lb
GBS-3 DN40 1 1/2"	3000 Psi	4.21"	2.11"	9.07"	3.35"	0.53"	4.94"	4.45"	11.81"	5.30"	0.11"	2.37"	4.02"	2.95"	2.11"	0.16"	0.67"	1.57"	18.22 lb
GBS-3 DN50 2"	3000 Psi	4.49"	2.24"	9.13"	3.86"	0.53"	5.22"	4.84"	11.81"	5.57"	0.11"	2.81"	4.65"	3.35"	2.49"	0.16"	0.67"	1.97"	21.75 lb
GBS-6 DN32 1 1/4"	5000 Psi	3.66"	1.83"	8.78"	2.95"	0.53"	4.39"	3.86"	11.81"	4.74"	0.11"	2.13"	3.46"	2.36"	1.75"	0.16"	0.67"	1.26"	12.85 lb
GBS-6 DN40 1 1/2"	5000 Psi	4.21"	2.11"	11.06"	3.35"	0.53"	4.94"	4.45"	11.81"	5.30"	0.11"	2.50"	4.02"	2.95"	2.11"	0.16"	0.67"	1.57"	18.19 lb
GBS-6 DN50 2"	5000 Psi	4.49"	2.24"	12.44"	3.86"	0.53"	5.22"	4.84"	11.81"	5.57"	0.11"	3.13"	4.65"	3.35"	2.49"	0.16"	0.67"	1.97"	25.96 lb



DIRECTIONS

ROBINETS A BILLE 2 VOIES / 2 WAY BALL VALVES

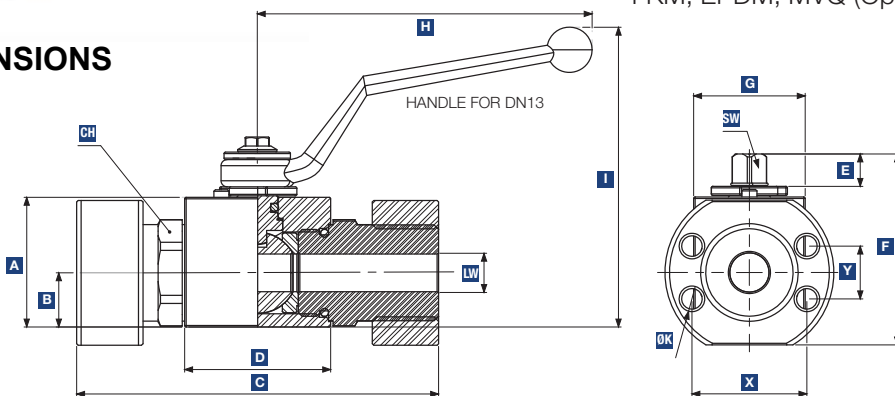
CARBON STEEL



SPECIFICATIONS

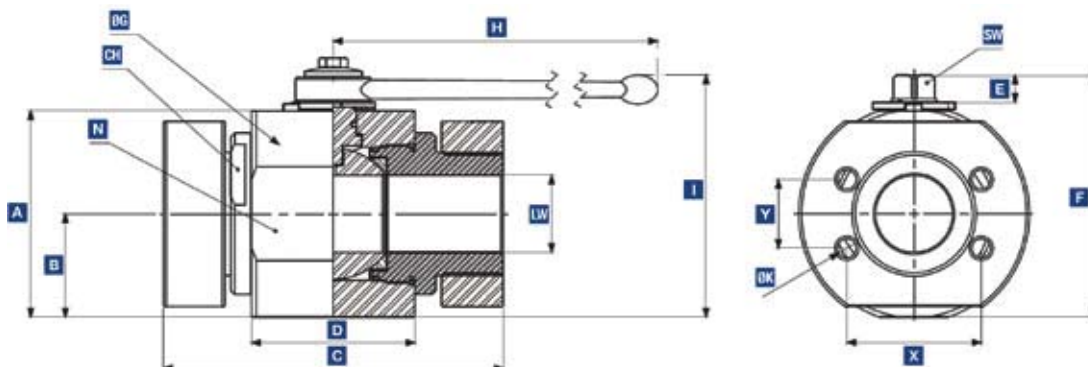
Body	Carbon steel
Ball	Carbon steel
Temperature Range	-4°F to 212° (depending on seal material selected) Delrin
Ball Seats	(Standard) POM, PEEK PA612, GEMPTFE, PTFE (Optional)
O-Rings	Buna N (Standard) FKM, EPDM, MVQ (Optional)

GEF DIMENSIONS



Model	PN	A	B	C	D	E	F	G	H	I	CH	X	Y	ØK	SW	LW	Weight
GEF-3 DN13 1/2"	5000 Psi	1.69"	0.71"	4.72"	1.91"	0.43"	2.24"	1.46"	4.33"	3.92"	1.26"	1.5"	0.69"	5/16-18 UNC	0.35"	0.51"	3.40 lb
GEF-3 DN20 3/4"	5000 Psi	2.17"	0.92"	5.35"	2.46"	0.55"	2.89"	1.77"	7.09"	4.19"	1.61"	1.87"	0.87"	3/8-16 UNC	0.55"	0.79"	5.75 lb
GEF-3 DN25 1"	5000 Psi	2.56"	1.16"	5.83"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	1.97"	2.13"	1.03"	3/8-16 UNC	0.55"	0.98"	8.58 lb
GEF-6 DN13 1/2"	6000 Psi	1.69"	0.71"	4.72"	1.91"	0.43"	2.24"	1.46"	4.33"	3.92"	1.26"	1.59"	0.72"	5/16-18 UNC	0.35"	0.51"	3.40 lb
GEF-6 DN20 3/4"	5800 Psi	2.17"	0.92"	5.35"	2.46"	0.55"	2.89"	1.77"	7.09"	4.19"	1.61"	2"	0.94"	5/16-18 UNC	0.55"	0.79"	5.75 lb
GEF-6 DN25 1"	5000 Psi	2.56"	1.16"	5.83"	2.62"	0.55"	3.29"	2.17"	7.09"	4.59"	1.97"	2.25"	1.09"	7/16-14 UNC	0.55"	0.98"	8.58 lb

GBF DIMENSIONS

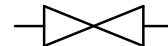


Model	PN	A	B	C	D	E	F	ØG	H	I	N	X	Y	ØK	CH	SW	LW	Weight
GBF-3 DN32 1-1/4"	4000 Psi	3.66"	1.83"	6.77"	2.95"	0.53"	4.39"	3.86"	11.81"	4.74"	3.23"	2.31"	1.19"	7/16-14 UNC	2.36"	0.67"	1.26"	17.86 lb
GBF-3 DN40 1-1/2"	3000 Psi	4.21"	2.11"	6.95"	3.35"	0.53"	4.94"	4.45"	11.81"	5.30"	4.02"	2.75"	1.41"	1/2-13 UNC	2.95"	0.67"	1.57"	24.56 lb
GBF-3 DN 50 2"	3000 Psi	4.49"	2.24"	7.72"	3.86"	0.53"	5.22"	4.84"	11.81"	5.57"	4.65"	3.06"	1.69"	1/2-13 UNC	3.35"	0.67"	1.97"	33.83 lb
GBF-6 DN32 1-1/4"	5000 Psi	3.66"	1.83"	6.77"	2.95"	0.53"	4.39"	3.86"	11.81"	4.74"	3.23"	2.63"	1.25"	1/2-13 UNC	2.36"	0.67"	1.26"	17.86 lb
GBF-6 DN40 1-1/2"	5000 Psi	4.21"	2.11"	6.95"	3.35"	0.53"	4.94"	4.45"	11.81"	5.30"	4.02"	3.13"	1.44"	5/8-11 UNC	2.95"	0.67"	1.57"	24.56 lb
GBF-6 DN 50 2"	5000 Psi	4.49"	2.24"	7.72"	3.86"	0.53"	5.22"	4.84"	11.81"	5.57"	4.65"	3.81"	1.75"	3/4-10 UNC	3.35"	0.67"	1.97"	33.83 lb



DIRECTIONS

ROBINETS A BILLE 2 VOIES / 2 WAY BALL VALVES



CARBON STEEL

MINI



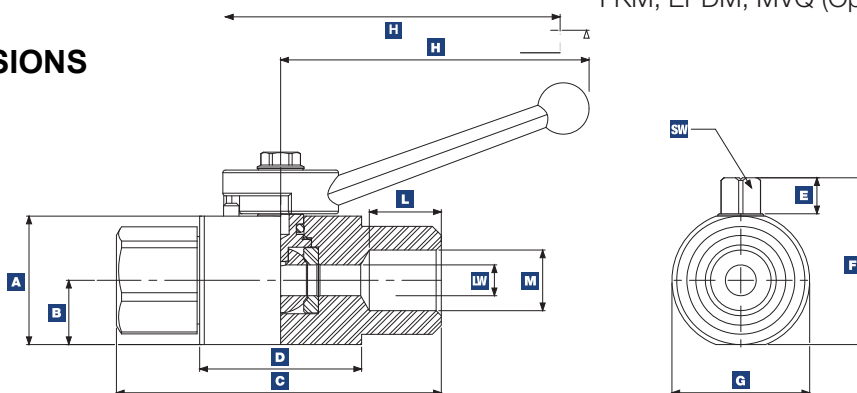
SPECIFICATIONS

Body	Carbon steel
Ball	Carbon steel
Temperature Range	-4°F to 212° (depending on seal material selected) Delrin
Ball Seats	(Standard) POM, PEEK PA612, GEMPTFE, PTFE (Optional)

O-Rings

Buna N (Standard)
FKM, EPDM, MVQ (Optional)

GEM DIMENSIONS



Part #	A	B	C	D	E	F	G	H	L	M	SW	LW
GEM 1/4" NPT 111 1AB	0.98"	0.49"	2.48"	1.85"	0.27"	1.26"	0.98"	2.24"	0.67"	1/4" NPT	0.24"	0.24"
GEM 1/4" SAE 111 1AB	0.98"	0.49"	2.48"	1.85"	0.27"	1.26"	0.98"	2.24"	0.67"	SAE-4	0.24"	0.24"

CODE INFORMATION

Part #	Ports	Working Pressure	Weight
GEM 1/4" NPT 111 1AB	1/4" NPT	7250 PSI	0.50 lb
GEM 1/4" SAE 111 1AB	SAE-4	7250 PSI	0.50 lb

-LK



SPECIFICATIONS

New design allows for increased security.
Kits are field installable.
Constructed of zinc plated carbon steel

CODE INFORMATION

If ordering factory installed add -LK
to the end of the ball valve #
i.e.: GE2-N-1/4"-LK

Value Size	Kit #
1/4"-1/2"	GE-LK-6
3/4"-1-1/2" reduced bore	GE-LK-20
1-1/4"-2" full bore	GB-LK



CLAPETS ANTI-RETOUR / CHECK VALVES



DIRECTIONS

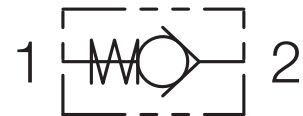
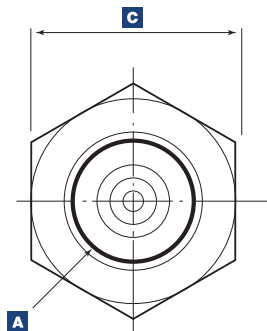
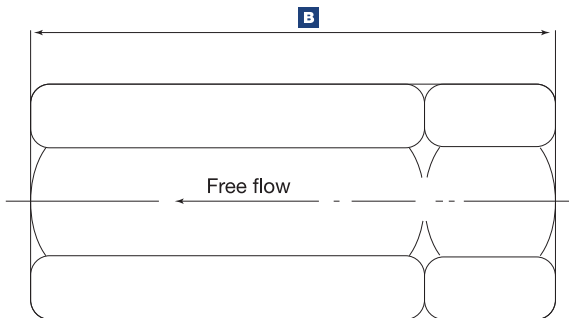


NC

SPECIFICATIONS

Maximum operating pressure 1/4" - 3/4" 5800 PSI (400 bar)
1" - 2" 5075 PSI (350 bar)
Temperature range -4°F to 176°F
Poppet seat Metal to metal
Material Steel with trivalent (CR3) plated finish for corrosion protection
Size Up to 2 inch
Options 7 PSI or 65 PSI cracking pressure
Call for other settings

DIMENSIONS



Model	A thread	B	C	Rated Flow	Weight	Model	A thread	B	C	Rated Flow	Weight
NC-250-S*-NN	1/4" NPT	2.28"	0.75"	4 GPM	0.22 lb	NC-1000-S*-N	1" NPT	4.33"	1.6"	39.6 GPM	1.7 lb
NC-250-S*-SAE	7/16"-20 UNF	2.17"	0.75"	4 GPM	0.20 lb	NC-1000-S*-SAE	1-5/16"-12 UNF	4.33"	1.6"	39.6 GPM	1.6 lb
NC-375-S*-N	3/8" NPT	2.72"	0.95"	7.9 GPM	0.40 lb	NC-1250-S*-N	1-1/4" NPT	4.72"	2.2"	52.8 GPM	3.3 lb
NC-375-S*-SAE	9/16"-18 UNF	2.28"	0.75"	7.9 GPM	0.24 lb	NC-1250-S*-SAE	1-5/8"-12 UNF	4.72"	2.2"	52.8 GPM	3.4 lb
NC-500-S*-N	1/2" NPT	2.95"	1.0"	13.2 GPM	0.50 lb	NC-1500-S*-N	1-1/2" NPT	5.43"	2.4"	79.2 GPM	5.7 lb
NC-500-S*-SAE	3/4"-16 UNF	2.71"	0.95"	13.2 GPM	0.40 lb	NC-1500-S*-SAE	1-7/8"-12 UNF	5.43"	2.4"	79.2 GPM	5.5 lb
NC-750-S*-N	3/4" NPT	3.48"	1.38"	23.8 GPM	1.0 lb	NC-2000-S*-N	2" NPT	5.43"	3.0"	113.5 GPM	6.6 lb
NC-750-S*-SAE	1-1/16"-12 UNF	3.48"	1.38"	23.8 GPM	1.0 lb	NC-2000-S*-SAE	2-1/2"-12 UNF	5.43"	3.0"	113.5 GPM	6.4 lb

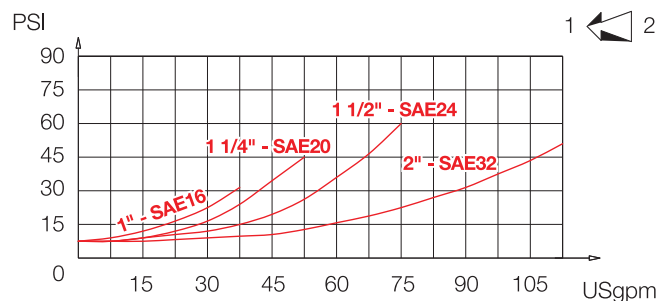
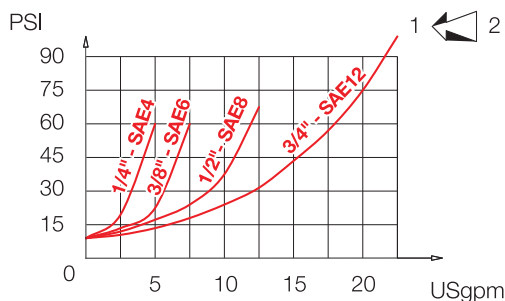
CODE INFORMATION

NC- 500
Check valve series
Size
250 - 1/4"
375 - 3/8"
500 - 1/2"
750 - 3/4"
1000 - 1"
1250 - 1-1/4"
1500 - 1-1/2"
2000 - 2"

S- 65-
Material
Steel
Cracking pressure
7 - 7.25 PSI
65 - 65.25 PSI

SAE
Threads
N - NPT
SAE - SAE

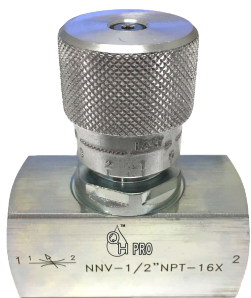
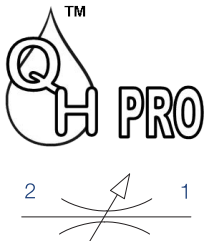
PERFORMANCE CURVES





FLOW / DÉBIT

VALVES A POINTEAU / NEEDLE VALVES



SPECIFICATIONS

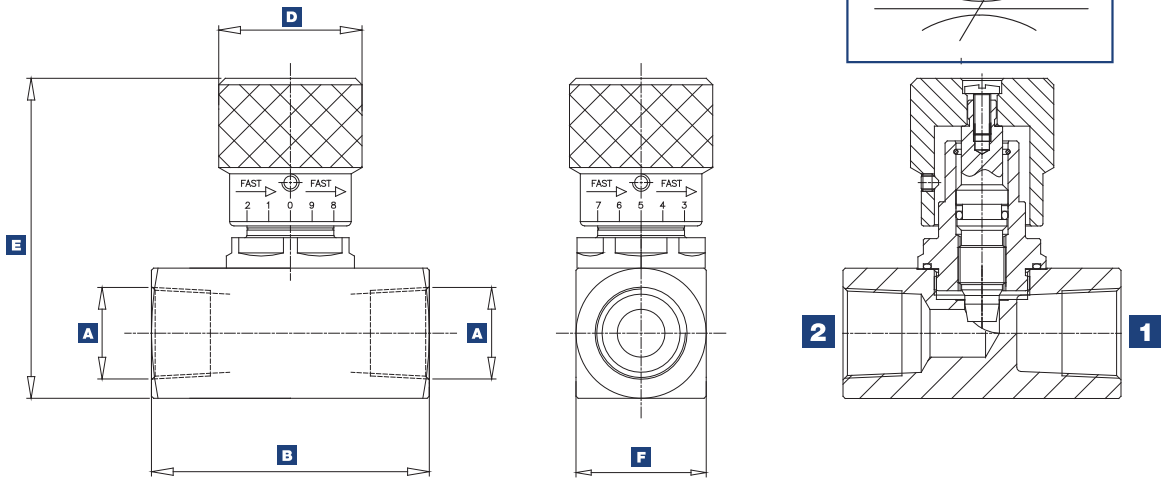
Fluid viscosity	45 to 2000 ssu (6 to 420 cSt)
Filtration	SAE class 4 or better
Fluid temperature	-4°F to 176°F
Ambient temperature	-4°F to 122°F

MATERIALS

Valve body-setting fitting	High resistance steel CF39SMnPb36 (EN10087)
Setting knob	Aluminium P-AlCu5.5PbBi (UNI 90002/5)
Setting spool	High resistance steel CF35SMnPb10 (EN10087)
O-ring	NBR 70 Sh
External treatment	Zinc plating FeZn8c1A (UNI 2081)

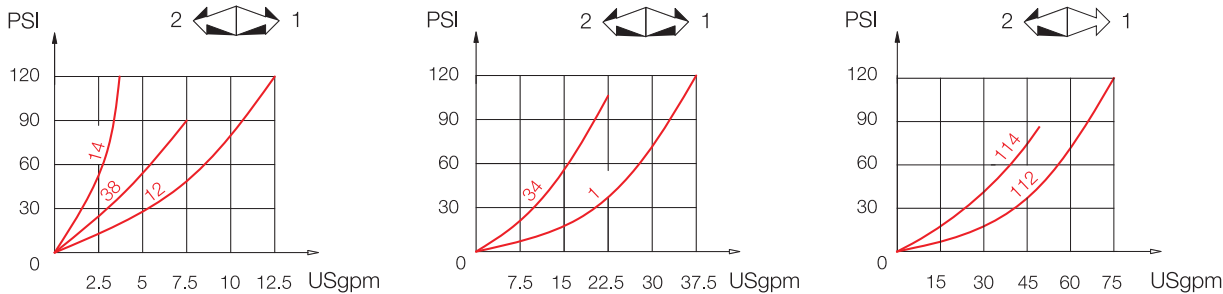
NNV-NPTF

DIMENSIONS & TECHNICAL PERFORMANCE



Code	A	Max flow	Max pressure	B	D	E	F	Approx. wt.
NNV-1/4"-NPT	NPTF 1/4	4 gpm	5800 PSI	2.13"	1.18"	2.68"	0.98"	0.71 lb
NNV-3/8"-NPT	NPTF 3/8	8 gpm	5800 PSI	2.13"	1.18"	2.68"	0.98"	0.66 lb
NNV-1/2"-NPT	NPTF 1/2	13 gpm	5800 PSI	2.52"	1.30"	2.84"	1.18"	1.03 lb
NNV-3/4"-NPT	NPTF 3/4	21 gpm	5800 PSI	3.19"	1.65"	3.70"	1.57"	2.31 lb
NNV-1"-NPT	NPTF 1	40 gpm	5800 PSI	4.02"	1.65"	3.90"	1.77"	2.95 lb
NNV-1-1/4"-NPT	NPTF 1-1/4	50 gpm	4000 PSI	4.02"	2.08"	4.78"	2.16"	5.21 lb
NNV-1-1/2"-NPT	NPTF 1-1/2	80 gpm	4000 PSI	4.02"	2.08"	5.17"	2.55"	6.60 lb

PRESSURE DROPS





FLOW / DÉBIT

VALVES A POINTEAU / NEEDLE VALVES



NNV-SAE

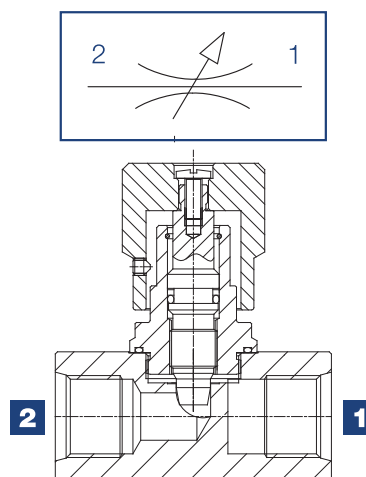
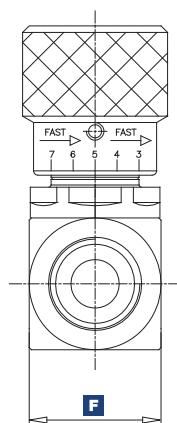
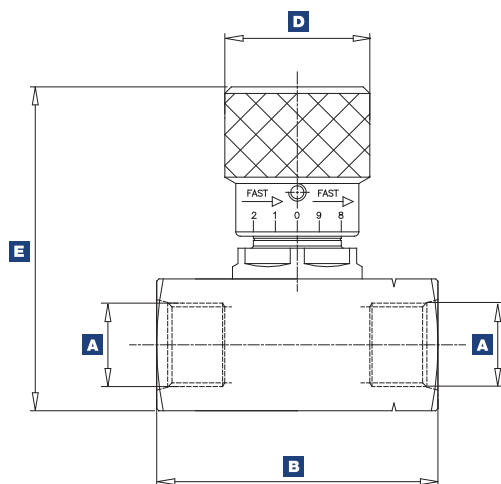
SPECIFICATIONS

Fluid viscosity	45 to 2000 ssu (6 to 420 cSt)
Filtration	SAE class 4 or better
Fluid temperature	-4°F to 176°F
Ambient temperature	-4°F to 122°F

MATERIALS

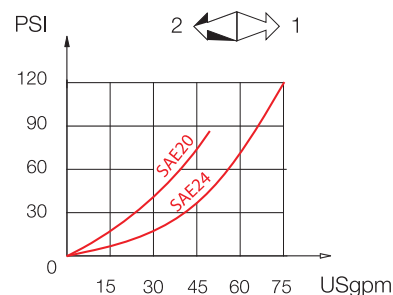
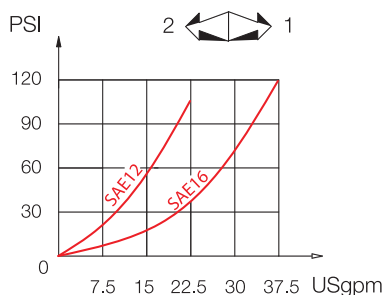
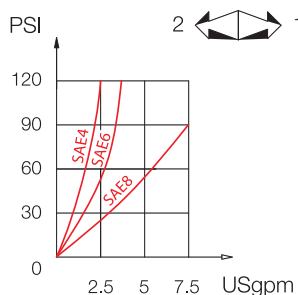
Valve body-setting fitting	High resistance steel CF39SMnPb36 (EN10087)
Setting knob	Aluminium P-AlCu5.5PbBi (UNI 90002/5)
Setting spool	High resistance steel CF35SMnPb10 (EN10087)
O-ring	NBR 70 Sh
External treatment	Zinc plating FeZn8c1A (UNI 2081)

DIMENSIONS & TECHNICAL PERFORMANCE



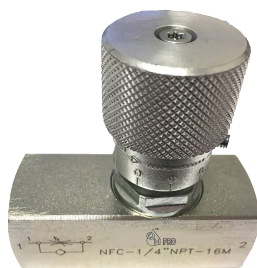
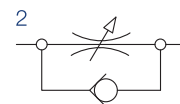
Code	A	Max flow	Max pressure	B	D	E	F	Approx. wt.
NNV-SAE4	7/16 - 20UNF	4 gpm	5800 PSI	2.13"	1.18"	2.68"	0.98"	0.71 lb
NNV-SAE6	9/16 - 18UNF	8 gpm	5800 PSI	2.13"	1.18"	2.68"	0.98"	0.66 lb
NNV-SAE8	3/4 - 16UNF	13 gpm	5800 PSI	2.52"	1.30"	2.84"	1.18"	1.03 lb
NNV-SAE12	1-1/16 - 12UNF	21 gpm	5800 PSI	3.19"	1.65"	3.70"	1.57"	2.31 lb
NNV-SAE16	1-5/16 - 12UNF	40 gpm	5800 PSI	4.02"	1.65"	3.90"	1.77"	2.95 lb
NNV-SAE20	1-5/8 - 12UN	50 gpm	4000 PSI	4.02"	2.08"	4.78"	2.16"	5.21 lb
NNV-SAE24	1-7/8 - 12UN	80 gpm	4000 PSI	4.02"	2.08"	5.17"	2.55"	6.60 lb

PRESSURE DROPS





REGULATEUR DE DÉBIT / FLOW CONTROL



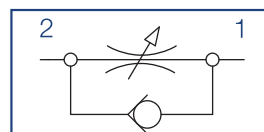
NFC-NPTF

SPECIFICATIONS

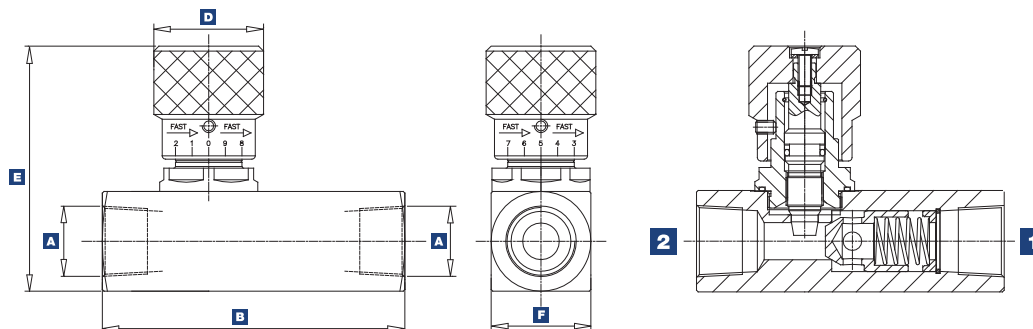
Fluid viscosity	45 to 2000 ssu (6 to 420 cSt)
Filtration	SAE class 4 or better
Fluid temperature	-4°F to 176°F
Ambient temperature	-4°F to 122°F

MATERIALS

Valve body-setting fitting-thread/ring	High resistance steel CF39SMnPb36 (EN10087)
Setting knob	Aluminium P-AlCu5.5PbBi (UNI 90002/5)
Setting spool	High resistance steel CF35SMnPb10 (EN10087)
Poppet	High resistance steel 16CrNi4Pb (EN10084) - Hardened (UNI5381) and ground
Spring	High resistance steel Oteva 70 (EN10270/2)
O-ring	NBR 70 Sh
Elastic ring	UNI 7437
External treatment	Zinc plating FeZn8c1A (UNI 2081)

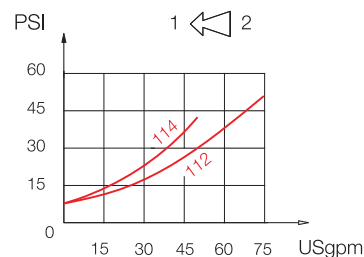
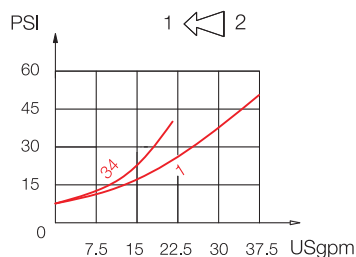
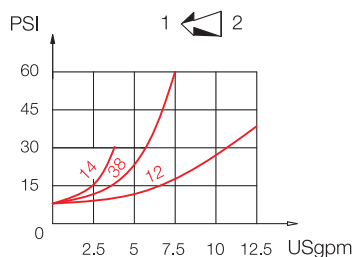
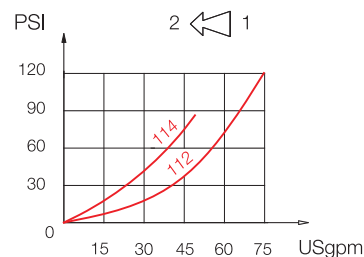
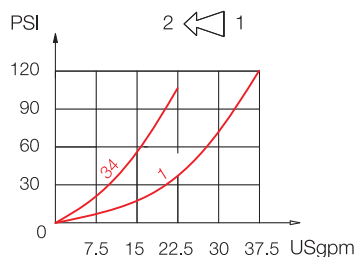
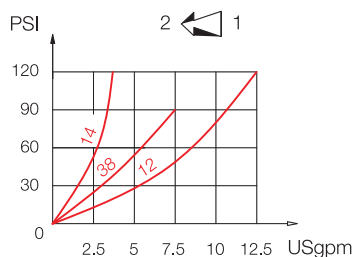


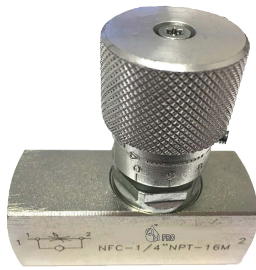
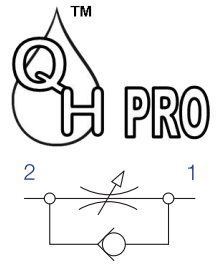
DIMENSIONS & TECHNICAL PERFORMANCE



Code	A	Max flow	Max pressure	B	D	E	F	Approx. wt.
NFC-1/4"-NPT	NPTF 1/4	4 gpm	5800 PSI	2.60"	1.18"	2.68"	0.98"	0.75 lb
NFC-3/8"-NPT	NPTF 3/8	8 gpm	5800 PSI	3.03"	1.18"	2.68"	0.98"	0.90 lb
NFC-1/2"-NPT	NPTF 1/2	13 gpm	5800 PSI	3.58"	1.30"	2.83"	1.18"	1.32 lb
NFC-3/4"-NPT	NPTF 3/4	21 gpm	5800 PSI	4.43"	1.65"	3.70"	1.57"	3.09 lb
NFC-1"-NPT	NPTF 1	40 gpm	5800 PSI	5.55"	1.65"	3.90"	1.77"	4.20 lb
NFC-1-1/4"-NPT	NPTF 1-1/4	50 gpm	4000 PSI	6.10"	2.08"	4.78"	2.16"	6.73 lb
NFC-1-1/2"-NPT	NPTF 1-1/2	80 gpm	4000 PSI	6.61"	2.08"	5.17"	2.55"	10.00 lb

PRESSURE DROPS





NFC-SAE

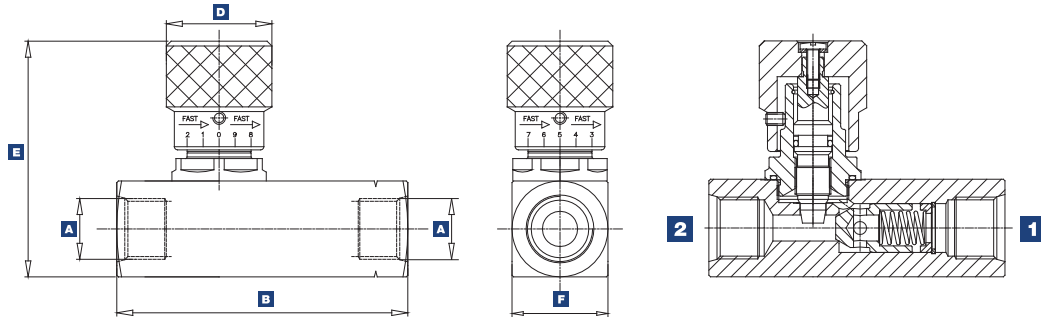
SPECIFICATIONS

Fluid viscosity	45 to 2000 ssu (6 to 420 cSt)
Filtration	SAE class 4 or better
Fluid temperature	-4°F to 176°F
Ambient temperature	-4°F to 122°F

MATERIALS

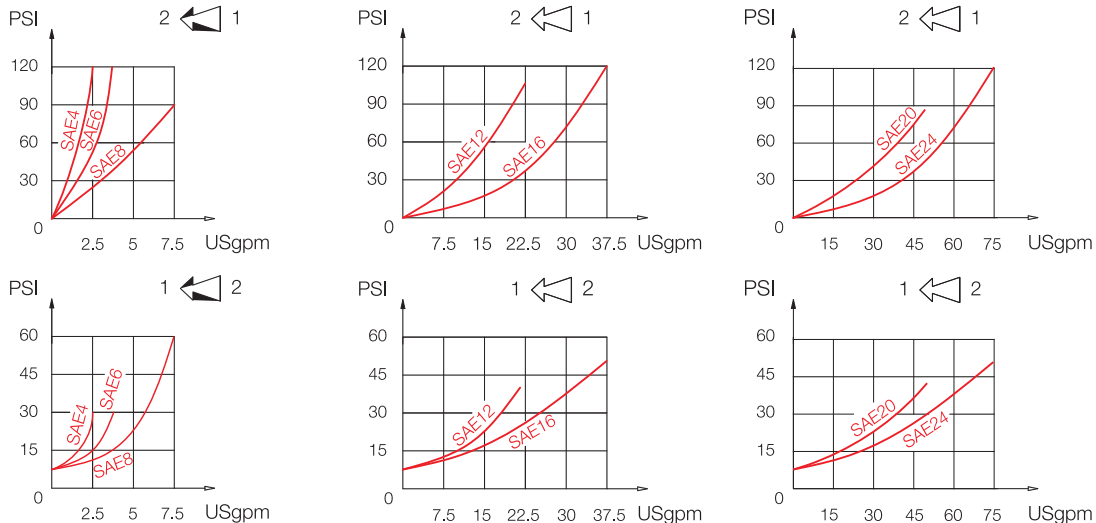
Valve body-setting fitting-thread/ring	High resistance steel CF39SMnPb36 (EN10087)
Setting knob	Aluminium P-AlCu5.5PbBi (UNI 90002/5)
Setting spool	High resistance steel CF35SMnPb10 (EN10087)
Poppet	High resistance steel 16CrNi4Pb (EN10084) - Hardened (UNI5381) and ground
Spring	High resistance steel Oteva 70 (EN10270/2)
O-ring	NBR 70 Sh
Elastic ring	UNI 7437
External treatment	Zinc plating FeZn8c1A (UNI 2081)

DIMENSIONS & TECHNICAL PERFORMANCE



Code	A	Max flow	Max pressure	B	D	E	F	Approx. wt.
NFC-SAE4	7/16 - 20UNF	4 gpm	5800 PSI	2.60"	1.18"	2.68"	0.98"	0.85 lb
NFC-SAE6	9/16 - 18UNF	8 gpm	5800 PSI	2.78"	1.18"	2.68"	0.98"	0.88 lb
NFC-SAE8	3/4 - 16UNF	13 gpm	5800 PSI	3.58"	1.30"	2.83"	1.18"	1.32 lb
NFC-SAE12	1-1/16 - 12UN	21 gpm	5800 PSI	4.43"	1.65"	3.70"	1.57"	2.80 lb
NFC-SAE16	1-5/16 - 12UN	40 gpm	5800 PSI	5.55"	1.65"	3.90"	1.77"	4.11 lb
NFC-SAE20	1-5/8 - 12UN	50 gpm	4000 PSI	6.10"	2.08"	4.78"	2.16"	6.73 lb
NFC-SAE24	1-7/8 - 12UN	80 gpm	4000 PSI	6.61"	2.08"	5.17"	2.55"	10.00 lb

PRESSURE DROPS

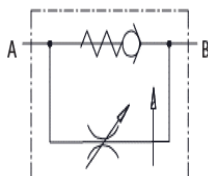




FLOW CONTROL, PRESSURE COMPENSATED

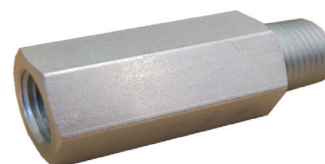
- CONTROL FLOW IN ONE DIRECTION

PART NO	PORTS	MAX PSI	MAX GPM
FRC90-01-SAE6	SAE-06	3625	4.5
FRC90-02-SAE8	SAE-08		

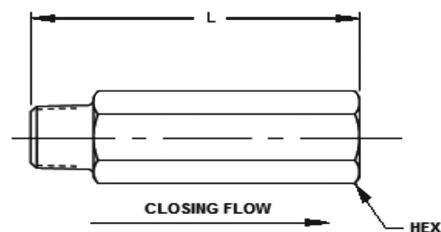


VELOCITY FUSES

- PROVIDES FULL-LINE SHUT-OFF IN THE EVENT OF LINE FAILURE
- CLOSING TOLERANCE 15% / - 0%
- MAX PRESSURE: 3500 PSI
- RE-OPENING DIFFERENTIAL: 50 PSI
- FEMALE NPT TO MALE NPT



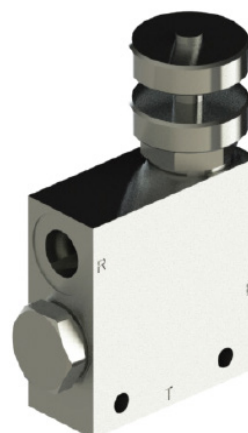
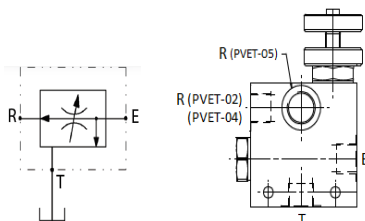
PART NUMBER	CLOSING GPM	PORTS NPT	DIMENSIONS	
			L	HEX
28900-503-3	3	3/8"	2.7	0.88
28900-503-6	6			
28900-504-7	7			
28900-504-8	8	1/2"	3.0	1.13
28900-504-12	12			



3 WAYS PRIORITY VALVE, EXCESS TO TANK, WITH KNOB

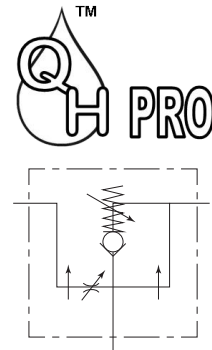
- 3000 PSI MAXIMUM PRESURE
- PRESSURE COMPENSATED

PART NO	MAX GPM		PORTS
	INLET	CONTROL	
PVET-02	10.5	6.5	SAE-08
PVET-04	39	23.5	SAE-12
PVET-05	74	50	SAE-16





DIVISEURS DE DÉBIT PRESSION COMPENSÉE PRESSURE COMPENSATING FLOW DIVIDER



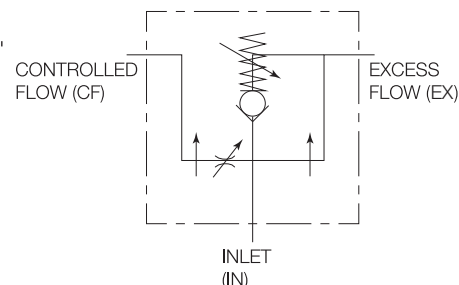
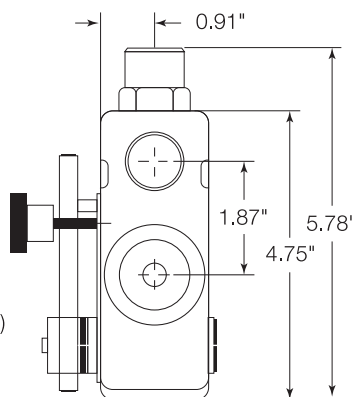
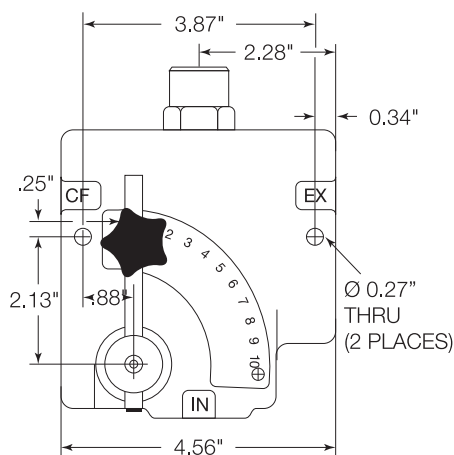
FEATURES

QHPCC-*-51 model is a full range pressure compensating variable flow control. It is designed so that the orifice area varies as the lever is rotated. The outlet flow is smooth and constant regardless of the pressure on the control flow or excess flow ports. An adjustable ball spring relief allows for pressure compensated flow up to the pressure setting on the relief. Relief valves are preset at 1500 psi and field adjustable from 750 to 3000 psi.

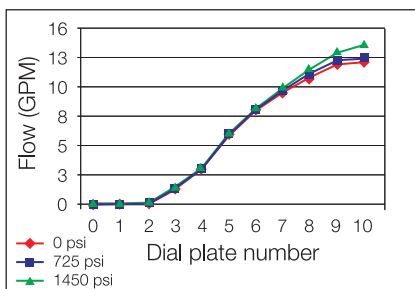
MATERIALS

Cast iron body, heat treated compensator spool, stainless steel rotary spool, Buna N "O" rings (standard).

DIMENSIONS



FLOW CURVE & INFORMATION



Code	Size	Flow
38-N	3/8"-NPT	0-8 gpm
12-N	1/2"-NPT	0-16 gpm
34-N	3/4"-NPT	0-30 gpm
08-S	9/16-18 UNF	0-8 gpm
10-S	7/8-14 UNF	0-16 gpm
12-S	1 1/16-12 UNF	0-30 gpm

CODE INFORMATION

QHPCC-

Pressure compensated flow control

R-

Adjustable ball spring relief

N - No relief

51-

Standard flow control

34-N

Port size:

38-N 08-S
12-N 10-S
34-N 12-S



DIVISEURS DE DÉBIT PRESSION COMPENSÉE PRESSURE COMPENSATING FLOW DIVIDER

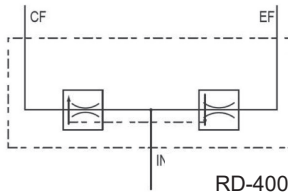
FIXED FLOW PRIORITY DIVIDERS

- 3000 PSI MAXIMUM PRESSURE
- 30 GPM MAXIMUM FLOW
- OTHER FIXED FLOW AVAILABLE: 1,5 TO 14 GPM

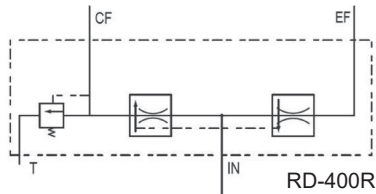
PART NO	FIXED FLOW	RELIEF	INLET & EXCESS PORT	CONTROL FLOW PORT
RD-405-3	3 GPM	NO	3/4 NPT	1/2 NPT
RD-405-6	6 GPM			
RD-405-R3	3 GPM	YES	3/4 NPT	1/2 NPT
RD-405-R6	6 GPM			
RD-412-1,5	1,5 GPM	YES	SAE 12	SAE 08



RD-400



RD-400



RD-400R

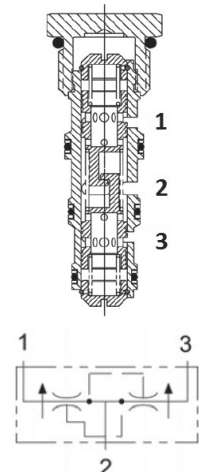
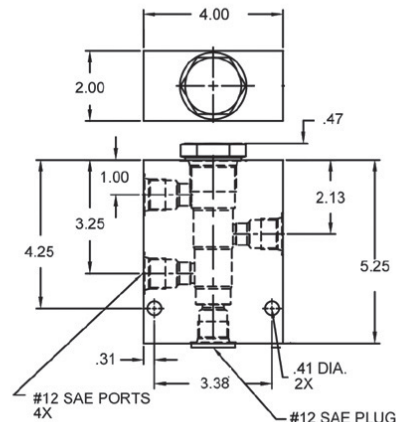
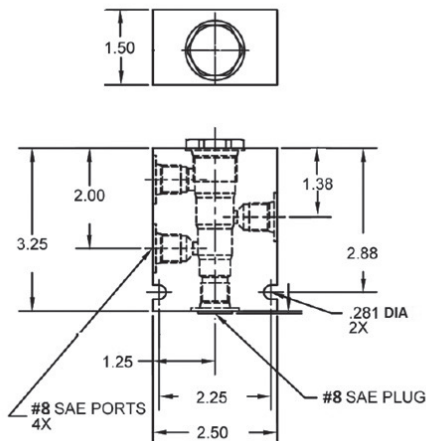


RD-400R

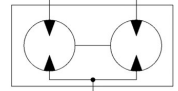
PRESSURE COMPENSATED FLOW DIVIDERS

- DIVIDER / COMBINER
- 3000 PSI MAXIMUM PRESSURE
- PRECISE AT +/- 10% ACCURACY
- COMMON CAVITIES

PART NUMBER	INLET FLOW	PORT SIZE
DG-FDA-00-50-03	2-3 GPM	SAE 08 (USE BODY 30102362)
DG-FDA-00-50-06	3-6 GPM	
DG-FDA-00-50-09	6-9 GPM	
DG-FDA-00-50-12	9-12 GPM	
SN-FDA-00-50-15	8-15 GPM	SAE 12 (USE BODY 30102577)
SN-FDA-00-50-25	15-25 GPM	
SN-FDA-00-50-40	20-40 GPM	



DIVISEURS DE DÉBIT A ENGRENAGES GEAR FLOW DIVIDERS



FLOW DIVIDERS GEAR TYPE

- SPLIT FLOW EQUALLY WITH +/- 1,5% ACCURACY
- INTEGRATED RELIEFS TO REALIGN CYLINDERS WHEN THEY REACH END OF CYCLE
- FOR QUIETER OPERATION, SELECT SPEED AT REC FLOW



9RV02A49



9RV02B06

PART NUMBER	NUMBER OF SECTIONS	PO3/REV.	RPM		GPM		MAX PSI	PORTS SIZE	
			MIN	MAX	MIN	MAX		IN	OUT
9RV02B01	2	0.01	1155	7392	0.1	0.64	3045	SAE-4	SAE-4
9RV02B06	2	0.05	1200	5867	0.53	1.27	3045		
9RV02B20	2	0.13	1175	6095	1.32	6.86	3190	SAE-8	SAE-6
9RV02B27	2	0.26	1060	5400	2.38	12.16	3190		
9RV02B34	2	0.48	1082	4520	4.5	18	3045	SAE-12	SAE-10
9RV02B49	2	0.85	1200	2500	8.88	18.4	3000		
9RV04B20	4	0.13	1175	6095	2.64	13.72	3190	SAE-8	SAE-6
9RV04B27	4	0.26	1060	5400	4.76	24.32	3190		

FLOW DIVIDERS GEAR TYPE

- SPLIT FLOW EQUALLY WITH +/- 2% ACCURACY
- INTEGRATED RELIEFS TO REALIGN CYLINDERS WHEN THEY REACH END OF CYCLE
- FOR QUIETER OPERATION, SELECT SPEED AT RECOMMENDED FLOW
- CAN BE USE INTERNAL OR EXTERNAL DRAIN
- AVAILABLE FROM 2 TO 16 SECTIONS

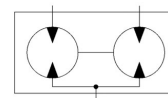


PART NUMBER	NUMBER OF SECTIONS	PO3/REV.	RPM		GPM		MAX PSI	PORTS SIZE	
			MIN	MAX	MIN	MAX		IN	OUT
PM2-RV **	2	0.11	500	3500	0.5	3.5	2000	1/2 NPT	3/8 NPT
PM6-RV **	2	0.32			1.35	9.5	1500		
HPR23	2	0.70			3.0	21	3000	SAE 16	SAE 12
HPR27	2	1.46			6.3	44	3000		
PPM2-RV **	4	0.11			1.0	7.0	1500	1/2 NPT	3/8 NPT
HPR21-59	4	0.41			3.57	25	3000		
HPR23-59	4	0.70			6	42	3000	SAE 16	SAE 12

** Model available without reliefs



DIVISEURS DE DÉBIT A ENGRENAGES GEAR FLOW DIVIDERS



DESCRIPTION

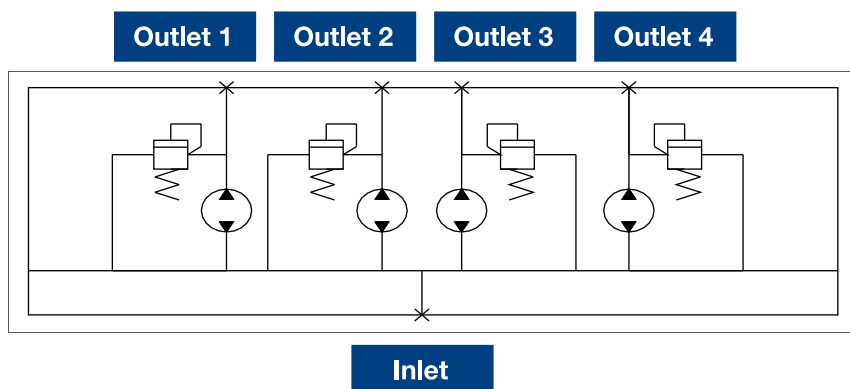
SERIE QHFD

- QH™ PRO Hydraulic Gear dividers work from a single pump source to:
 - 1) Synchronize operation of multiple cylinders or fluid motors.
 - 2) Intensify pressure when pressure higher than pump capacity is required.
 - 3) Proportionally divide pump flow out among several circuits.
- AFD1 Series displacement: 1.60 cm³ to 8.42 cm³ per section
- AFD2 Series displacement: 6 cm³ to 31 cm³ per section



TECHNICAL DATA

- Housing: Aluminum
- Filtration 25 micron or better
- Fluid: Hydraulic Fluid HLP mineral Oil DIN 51524 Part2+/-
- Flow Accuracy: 1.5%-2%
- Pressure Drop: 230-275 PSI (16-19 BAR)



See next pages for dimensions and ordering information for QHFD1.

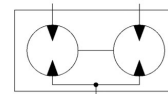


FLOW / DÉBIT

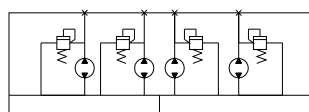
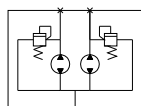
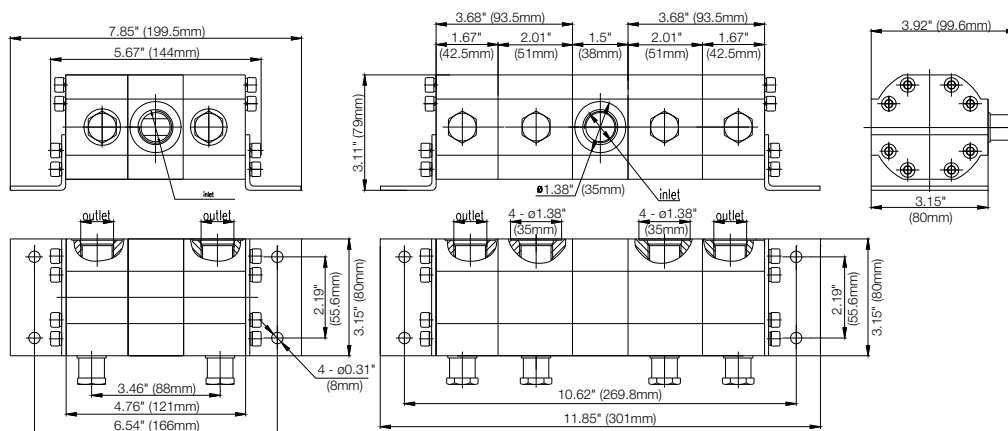
DIVISEUR ENGRENAGES / GEAR DIVIDERS ALUMI



SERIE QHFD1



DIMENSIONS Displacement up to 8.42 cm^3 per section



Displacement per section		SAE Port		Min. Flow/sec		Max. Flow/sec		Cont. Diff. Between Pressure Inlet/Outlet		Maximum Outlet Pressure any section	
cm ³ /rev	cu.in/rev	Inlet	Outlet	LPM	GPM	LPM	GPM	PSI	BAR	PSI	BAR
1.60	0.097	SAE8	SAE6	3.0	0.8	6.4	1.7	1800	124	3500	240
2.13	0.129	SAE8	SAE6	4.5	1.2	9.5	2.5	1800	124	3500	240
3.18	0.194	SAE8	SAE6	6.4	1.7	13.2	4.5	1800	124	3500	240
4.24	0.258	SAE10	SAE10	9.5	2.5	18.9	5.0	1800	124	3500	240
5.29	0.323	SAE10	SAE10	11.4	3.0	22.7	6.0	1800	124	3500	240
6.36	0.388	SAE10	SAE10	13.2	3.5	26.5	7.0	1600	110	3500	240
7.42	0.483	SAE10	SAE10	15.1	4.0	30.3	8.0	1300	90	3500	240
8.42	0.517	SAE10	SAE10	17.0	4.5	34.1	9.0	1200	83	3500	240

CODE INFORMATION

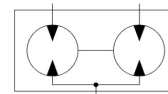
QHFD1	2	R	2.13	S
Flow Divider	Sections	Relief valve	Displacement cm ³	SAE Ports
	2 2 sections		See Table	See Table
	4 4 sections			



DIVISEUR ENGRENAGES / GEAR DIVIDERS **ALUMI**

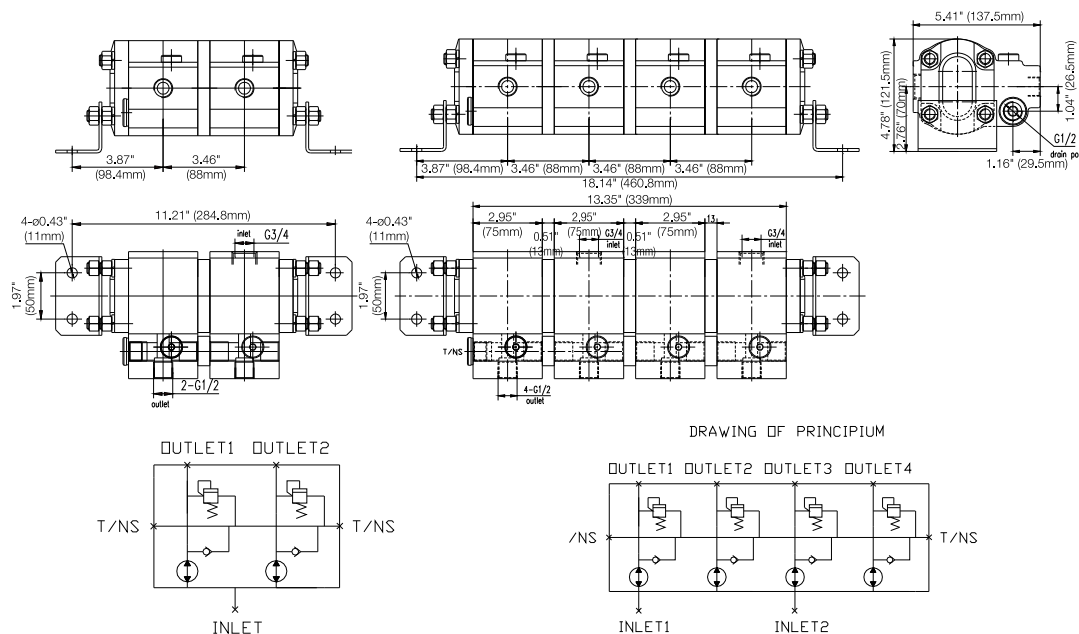


SERIE QHFD2



DIMENSIONS

Displacement up to 31 cm³ per section



Displacement per section		SAE Port			Min. Flow/sec		Max. Flow/sec		Cont. Diff. Between Pressure Inlet/Outlet		Maximum Outlet Pressure any section	
cm ³ /rev	cu.in/rev	Inlet	Outlet	Drain	LPM	GPM	LPM	GPM	PSI	BAR	PSI	BAR
6	0.366	SAE10	SAE8	SAE6	3.0-16	0.8-4.2	18	4.8	3142	220	3571	250
8	0.488	SAE10	SAE8	SAE6	4.0-19	1.1-5.0	22	5.8	3142	220	3571	250
11	0.671	SAE10	SAE8	SAE6	5.5-25	1.5-6.6	27	7.1	3142	220	3571	250
14	0.854	SAE10	SAE8	SAE6	7.0-32	1.8-8.4	34	9.0	2857	200	3142	220
17	1.037	SAE12	SAE8	SAE6	8.5-34	2.2-9.0	37	9.8	2857	200	3142	220
25	1.525	SAE12	SAE8	SAE6	12-48	3.1-	53	14	2857	200	3142	220
31	1.891	SAE12	SAE8	SAE6	14-60	3.7-	70	18.5	2286	160	2571	180

CODE INFORMATION

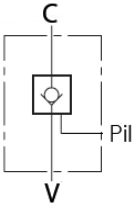
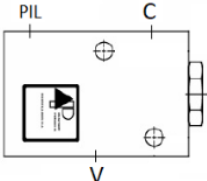
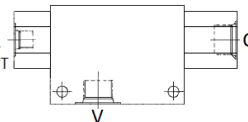
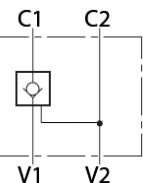
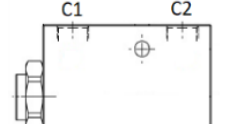
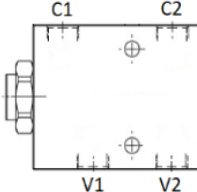
QHFD2	2	R	8	S
Flow Divider	Sections	Relief valve	Displacement cm ³	SAE Ports
	2 2 sections		See Table	See Table
	4 4 sections			

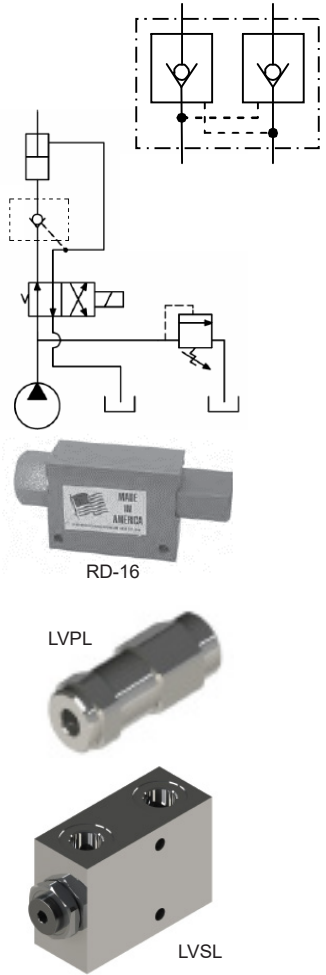


VALVES DE MAINTIEN / HOLDING VALVES



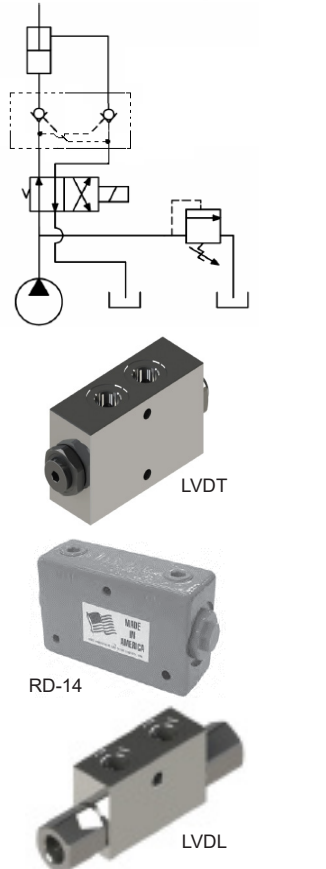
SINGLE PILOT OPERATED CHECK VALVES

PART NUMBER	PORTS	MAX GPM	MAX PSI	PILOT RATIO	SCHEMATIC	CONFIGURATION
PS-POC-B-N	1/4 NPT	10	3000	4 : 1		
PS-POC-B-S	SAE-06					
RD-1637	3/8 NPT					15
RD-1650	1/2 NPT	20	5075	6.2 : 1		
LVPL-02	SAE-08	10.5				
LVSL-02		9		3750		7 : 1
LVSL-025	SAE-10		7 : 1			



DOUBLE PILOT OPERATED CHECK VALVES

PART NUMBER	PORTS	MAX GPM	MAX PSI	PILOT RATIO	SCHEMATIC	CONFIGURATION
MD-POC-B-S	SAE-04	5	3000	6.7 : 1		
LVDL-01	SAE-06	5	3750	4:1		
LVDT-01		7	5075			
PD-POC-B-S		10	3000			
DD-POC-B-N	3/8 NPT	15				
LVDL-02	SAE-08	9	3750	7 : 1		
LVDT-02		12	4 : 1			
RD-1450	1/2 NPT	20		3000		
LVDL-03	SAE-10	16	3750	3.4 : 1		
RD-1475	3/4 NPT	30	3000	4 : 1		



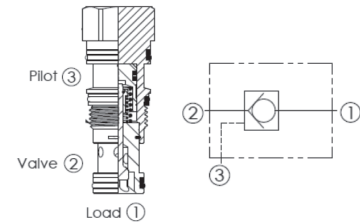


VALVES DE MAINTIEN / HOLDING VALVES

PILOT OPERATED CHECK VALVES

- 5000 PSI MAXIMUM PRESSURE
- PILOT RATIO: 3:1

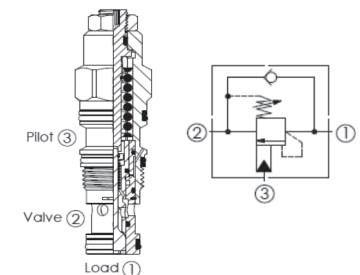
PART NUMBER	MAX GPM	CAVITY	SUN NO
CO11A3020N	15	T-11A	CKCB-XCN
CO2A3020N	30	T-2A	CKEB-XCN
CO17A3020N	60	T-17A	CKGB-XCN
CO19A3020N	120	T-19A	CKIB-XCN



COUNTERBALANCE VALVES

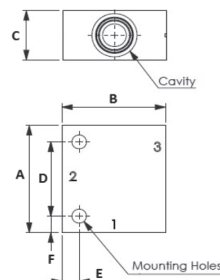
- 5000 PSI MAXIMUM PRESSURE
- PILOT RATIO OPTIONS

PART NUMBER	MAX GPM	CAVITY	PSI RANGE	RATIO	SUN NO
CB11A33HL	15	T-11A	1015 - 4060	3: 1	CBCA-LHN
CB11A34JL			2030 - 5070	4.5: 1	CBCG-LJN
CB11A30JL			2030 - 5070	10: 1	CBCH-LJN
CB2A33HL	30	T-2A	2000 - 5000	3: 1	CBEA-LHN
CB2A34JL				4.5: 1	CBEG-LJN
CB2A30JL				10: 1	CBEH-LJN
CB17A3DJL	60	T-17A	2000 - 5000	3: 1	CBGG-LJN
CB17A3JL				10: 1	CBGH-LJN

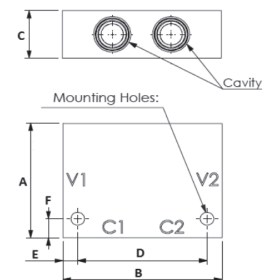


LINE MOUNT BODIES

- MADE IN ALUMINUM
- 3000 PSI MAXIMUM PRESSURE
- DUCTILE IRON AVAILABLE ON DEMAND



SINGLE BODY



DOUBLE BODY

SINGLE BODIES

PART NUMBER	CAVITY	PORTS 1 & 2	PORT 3	SUN NO	DIMENSIONS						HOLES (2)
					A	B	C	D	E	F	
11A-S-90-S06	T-11A	SAE 06	SAE 06	ECI	3.0	2.75	1.26	2.09	0.38	0.44	0.34
11A-S-90-S08	T-11A	SAE 08	SAE 06	ECJ							
2A-S-90-S12	T-2A	SAE 12	SAE 06	BCL	3.25	3.0	1.5	2.25	0.5	0.5	0.42
17A-S-90-S16	T-17A	SAE 16	SAE 06	HCM	4.25	4.0	2.36	2.75	0.75	0.75	
19A-S-90-S20	T-19A	SAE 20	SAE 06	KCN	5.0	5.0	3.0	4.0	0.5	0.5	

DOUBLE BODIES

PART NUMBER	CAVITY	PORTS	SUN NO	DIMENSIONS						HOLES (2)
				A	B	C	D	E	F	
11A-D-X-S08	T-11A	SAE 08	YEJ	3.25	3.0	1.5	2.25	0.5	0.5	0.42
2A-D-X-S12	T-2A	SAE 12	YAL	4.25	4.0	2.36	2.75	0.75	0.75	
17A-D-X-S16	T-17A	SAE 16	YJM	5.0	5.0	3.0	4.0	0.5	0.5	



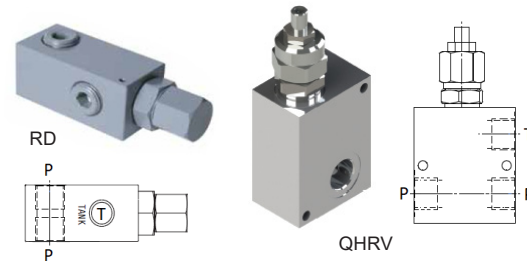
VALVES DE DÉCHARGE DE PRESSION PRESSURE RELIEF VALVES



PRESSURE / PRESSION

DIRECT ACTING RELIEF VALVES

PART NO	PORTS	PSI RANGE	MAX GPM	MAX PSI
RD-1837-S	3/8 NPT	1000 - 2500	8	2500
RD-1850-S	1/2 NPT		16	
RD-1850-H			16	
RD-1875-S	3/4 NPT		20	
PRL35-02-20A	SAE-08	580 - 3000	9	5075
QHRV35-02-30A		1450 - 5075		
QHRV80-03-20A	SAE-10	435 - 3770	21	
PRL80-04-20A	SAE-12			
PRL150-05-30A	SAE-16	725 - 5075	39	



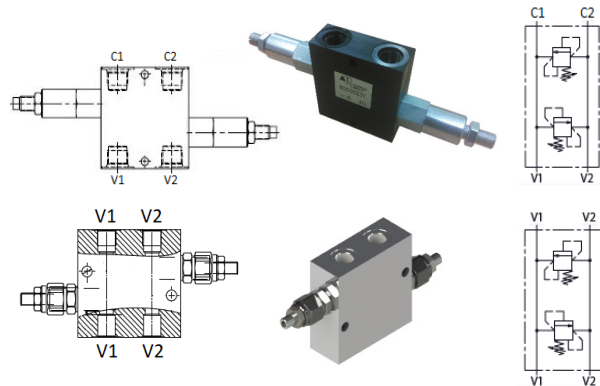
PILOT OPERATED RELIEF VALVES

PART NO	PORTS	PSI RANGE	MAX GPM	MAX PSI
RV-4L	1/2 NPT	500 - 1500	30	3000
RV-4H		1500 - 3000		
RV-2L	3/4 NPT	500 - 1500		
RV-2H		1500 - 3000		
RV-1L	SAE-12	500 - 1500		
RV-1H		1500 - 3000		

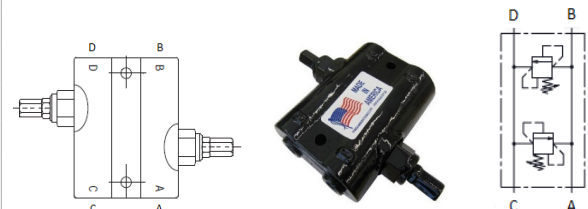


DUAL RELIEF VALVES, PILOT OPERATED

PART NO	PORTS	PSI RANGE	MAX GPM	MAX PSI
SA-00-15-15	SAE-08	150 - 1500	10	3000
SA-00-30-30		1500 - 3000		
SA-00-40-40		2500 - 4000		
DPRL35-02-30A	SAE-08	1450 - 5000	9	5000
DPRL80-04-30A	SAE-12	1880 - 5000	21	

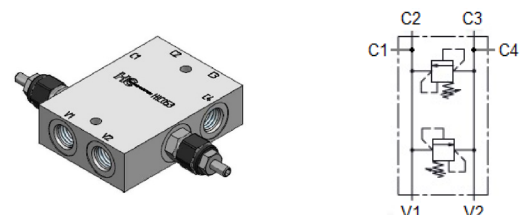


PART NO	PORTS	PSI RANGE	MAX GPM	MAX PSI
DRV-4LL	1/2 NPT	500 - 1500	30	3000
DRV-4HH		1500 - 3000		
DRV-5LL	SAE-08	500 - 1500		
DRV-5HH		1500 - 3000		
DRV-2LL	3/4 NPT	500 - 1500		
DRV-2HH		1500 - 3000		
DRV-1LL	SAE-12	500 - 1500		
DRV-1HH		1500 - 3000		



DUAL RELIEF VALVES, 6 PORTS

PART NO	PORTS	PSI RANGE	MAX GPM	MAX PSI
HIC-053	SAE-08	1450 - 5000	9	5000





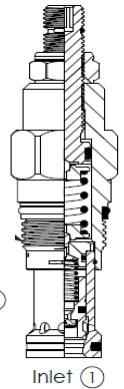
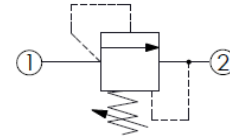
VALVES DE DÉCHARGE DE PRESSION PRESSURE RELIEF VALVES



PRESSURE / PRESSION

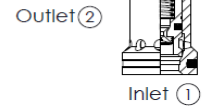
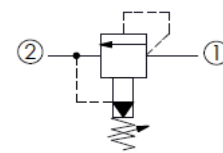
DIRECT ACTING RELIEF VALVES

PART NUMBER	MAX GPM	MAX PSI	PSI RANGE	CAVITY	SUN NO
DE-RVA-00-1500	8	4000	200-1500	C10-2	
DE-RVA-00-3000			1500-3000		
DE-RWA-00-3000			100-3000		
DE-RCA-00-3500	12	3500	250-3500		
RD10A25AL	25	5000	100-3000	T-10A	RDDA-LAN
RD3A25AL	50			T-3A	RDFA-LAN
RD16A25AL	100			T-16A	RDHA-LAN



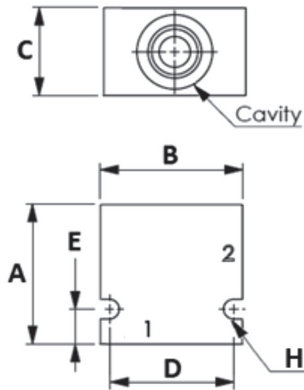
PILOT OPERATED RELIEF VALVES

PART NUMBER	GPM	MAX PSI	PSI RANGE	CAVITY	SUN NO
DE-RVP-00-4000	20	3500	500-3500	C10-2	
RP10A20AL	25	5000	100-3000	T-10A	RPEC-LAN
RP3A20AL	50			T-3A	RPGC-LAN
RP16A20AL	100			T-16A	RPIC-LAN

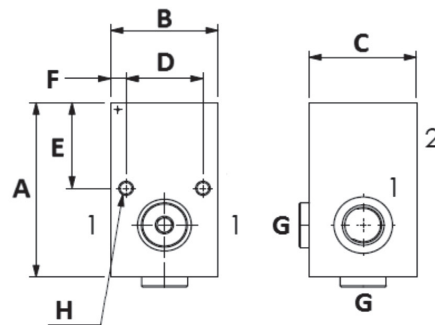


LINE MOUNT BODIES

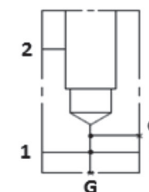
- MADE IN ALUMINUM
- 3000 PSI MAXIMUM PRESSURE
- GAUGE PORT ON SELECTED MODELS
- DUCTILE IRON AVAILABLE ON DEMAND



DIMENSION FOR C10-2 BODIES



DIMENSION FOR T-* BODIES



PART NUMBER	CAVITY	PORTS 1 & 2	SUN NO	DIMENSIONS							
				A	B	C	D	E	F	G	H (2)
30102359	C10-2	SAE 08		2.12	2.0	1.50	1.75	0.50	-	-	0.28
30102364		SAE 06									
10A-S-T-S08+G	T-10A	SAE 08	FEJ	2.94	1.75	1.75	1.25	1.44	0.25	1/4 NPT	1/4-20 UNC 1/2" DEEP
3A-S-T-S12+G	T-3A	SAE 12	CEL	3.25	2.0	2.0	1.50	1.37	0.25		
16A-S-T-S16+G	T-16A	SAE 16	IEM	4.0	3.0	2.25	-	3.0	0.5		0.42

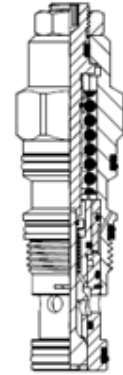


VALVES DE CONTRÔLE DE PRESSION PRESSURE CONTROL VALVES



PRESSURE CONTROLS

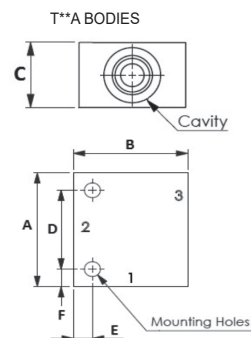
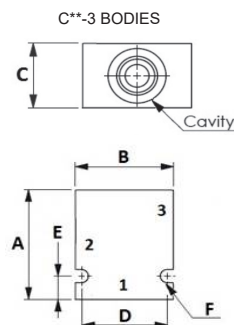
FUNCTION	PART NO	MAX GPM	MAX PSI	PSI RANGE	CAVITY	SCHEMATIC
VENTED RELIEF	RV11A30AL	15	5000	100 - 3000	T11-A	
	RV2A30AL	30			T2-A	
	RV17A30AL	60			T-17A	
	RV19A30AL	120			T-19A	
PRESSURE REDUCING	PB11A30AL	10	5000	100 - 3000	T11-A	
	PB2A30AL	20			T2-A	
	PB17A30AL	40			T-17A	
	PB19A30AL	80			T-19A	
PRESSURE REDUCING/RELIEVING	DF-PRP-00-3000	10	3000	100 - 3000	C10-3	
	SK-PRP-00-3000	20		500 - 3000	C16-3	
	PP11A30AL	10	5000	100 - 3000	T11-A	
	PP2A30AL	20			T2-A	
	PP17A30AL	40			T-17A	
	PP19A30AL	80			T-19A	
SEQUENCE	SP11A30AL	15	5000	100 - 3000	T11-A	
	SP2A30AL	30			T2-A	
	SP17A30AL	60			T-17A	
	SP19A30AL	120			T-19A	
UNLOADING	DF-PWE-00-0425	10	3000	50-425	C10-3	
	DF-PWE-00-1500			425-1500		



LINE MOUNT BODIES

- 3000 PSI MAXIMUM PRESSURE
- DUCTILE IRON AVAILABLE ON DEMAND

PART NUMBER	CAVITY	PORTS 1 & 2	PORT 3	DIMENSIONS						HOLES (2)
				A	B	C	D	E	F	
30102354	C10-3	SAE 08	SAE 08	2.5	2.5	1.5	2.25	0.38	0.28	-
30102576	C16-3	SAE 12	SAE 12	4.0	4.0	2.0	3.38	0.88	-	0.38
11A-S-90-S-8	T-11A	SAE 08	SAE 06	3.0	2.75	1.26	2.09	0.38	0.44	0.34
2A-S-90-S12	T-2A	SAE 12	SAE 06	3.25	3.0	1.5	2.25	0.5	0.5	0.42
17A-S-90-S16	T-17A	SAE 16	SAE 06	4.25	4.0	2.36	2.75	0.75	0.75	-
19A-S-90-S20	T-19A	SAE 20	SAE 06	5.0	5.0	3.0	4.0	0.5	0.5	-





VALVES

VALVES A CARTOUCHE / CARTRIDGE VALVES

SUN hydraulics
CORPORATION

Winner



SUN VS WINNER INTERCHANGES

SUN	WINNER	SUN	WINNER	SUN	WINNER	SUN	WINNER
CBCA-LHN	CB11A33HL	COJA-XCN	CO19A3020N	NFCC-LCN	NV13A2S48L	RDJA-LWN	RD18A20AW
CBCA-LIN	CB11A33IL	CSAA-EXN	LS13A20NS04	NFCD-KFN	NV13A2884K	RPCC-LAN	RP16A20AL
CBCG-LJN	CB11A34JL	CSAB-XXN	LS11A33NN	NFCD-LFN	NV13A2884L	RPCC-LWN	RP16A20AW
CBCG-LKN	CB11A34KL	CSAC-EXN	LS13A22NS04	NFDC-KAN	NV5A2S63K	RPEC-8DN	RP10A20D8
CBCH-LJN	CB11A30JL	CSAD-XXN	LS11A30NN	NFDC-LAN	NV5A2S63L	RPEC-8WN	RP10A20W8
CBCH-LKN	CB11A30KL	CSAW-EXN	LS162A20NS04	NFDD-KGN	NV5A28127K	RPEC-LAN	RP10A20AL
CBEA-LHN	CB2A33HL	CSAX-XXN	LS163A33NN	NFDD-LGN	NV5A28127L	RPEC-LWN	RP10A20AW
CBEA-LIN	CB2A33IL	CSAY-EXN	LS162A22NS04	NFEC-KEN	NV16A2S97K	RPGC-8DN	RP3A20D8
CBEG-LJN	CB2A34JL	CSAZ-XXN	LS163A30NN	NFEC-LEN	NV16A2S97L	RPGC-8WN	RP3A20W8
CBEG-LKN	CB2A3 L	CXAD-XCN	CV162A2120	NFED-KHN	NV16A28175K	RPGC-LAN	RP3A20AL
CBEH-LJN	CB2A30JL	CXBA-XAN	CV162A2003	NFED-LHN	NV16A28175L	RPGC-LWN	RP3A20AW
CBEH-LKN	CB2A30KL	CXBA-XCN	CV162A2020	NFFD-KIN	NV16A29216K	RPIC-8DN	RP16A20D8
CBGA-LHN	CB17A33HL	CXCD-XCN	CV13A2120	NFFD-LIN	NV16A29216L	RPIC-8WN	RP16A20W8
CBGA-LIN	CB17A33IL	CXDA-XAN	CV13A2003	PBDB-8DN	PP11A30D8	RPIC-LAN	RP16A20AL
CBGG-LJN	CB17A34JL	CXDA-XCN	CV13A2020	PBDB-8WN	PP11A30W8	RPIC-LWN	RP16A20AW
CBGG-LKN	CB17A34KL	CXED-XCN	CV5A2120	PBDB-LAN	PB11A30AL	RPKC-8DN	RP18A20D8
CBGH-LJN	CB17A30JL	CXFA-XAN	CV5A2003	PBDB-LWN	PB11A30WL	RPKC-8WN	RP18A20W8
CBGH-LKN	CB17A30KL	CXFA-XCN	CV5A2020	PBFB-8DN	PP2A30D8	RPKC-LAN	RP18A20AL
CBIA-LHN	CB19A33HL	CXGD-XCN	CV16A2120	PBFB-8WN	PP2A30W8	RPKC-LWN	RP18A20AW
CBIA-LIN	CB19A33IL	CXHA-XAN	CV16A2003	PBFB-LAN	PB2A30AL	RSDC-8DN	RV11A30D8
CBIG-LJN	CB19A34KL	CXHA-XCN	CV16A2020	PBFB-LWN	PB2A30WL	RSDC-8WN	RV11A30W8
CBIG-LKN	CB19A34JL	CXID-XCN	CV18A2120	PBHB-8DN	PP17A30D8	RSDC-LAN	SP11A30AL
CBIH-LJN	CB19A30KL	CXJA-XAN	CV18A2003	PBHB-8WN	PP17A30W8	RSDC-LWN	SP11A30WL
CBIH-LKN	CB19A30JL	CXJA-XCN	CV18A2020	PBHB-LAN	PB17A30AL	RSFC-8DN	RV2A30D8
CKBB-XCN	CO163A3020N	FDBA-KAN	FR13A20AK	PBHB-LWN	PB17A30WL	RSFC-8WN	RV2A30W8
CKBD-XCN	CO163A3C20N	FDBA-LAN	FR13A20AL	PBJB-8DN	PP19A30D8	RSFC-LAN	SP2A30AL
CKCB-XAN	CO11A3003N	FDCB-KAN	FR5A20AK	PBJB-8WN	PP19A30W8	RSFC-LWN	SP2A30WL
CKCB-XCN	CO11A3020N	FDCB-LAN	FR5A20AL	PBJB-LAN	PB19A30AL	RSHC-8DN	RV17A30D8
CKCD-XAN	CO11A3C03N	FDEA-KAN	FR16A20AK	PBJB-LWN	PB19A30WL	RSHC-8WN	RV17A30W8
CKCD-XCN	CO11A3C20N	FDEA-LAN	FR16A20AL	PPDB-LAN	PP11A30AL	RSHC-LAN	SP17A30AL
CKEB-XAN	CO2A3003N	FDFA-KAN	FR18A20AK	PPDB-LWN	PP11A30WL	RSHC-LWN	SP17A30WL
CKEB-XCN	CO2A3020N	FDFA-LAN	FR18A20AL	PPFB-LAN	PP2A30AL	RSJC-8DN	RV19A30D8
CKED-XAN	CO2A3C03N	FXCA-XAN*	FR13A2F****N	PPFB-LWN	PP2A30WL	RSJC-8WN	RV19A30W8
CKED-XCN	CO2A3C20N	FXDA-XAN*	FR5A2F****N	PPHB-LAN	PP17A30AL	RSJC-LAN	SP19A30AL
CKGB-XAN	CO17A3003N	NCCB-LCN	NC162A21BCL	PPHB-LWN	PP17A30WL	RSJC-LWN	SP19A30WL
CKGB-XCN	CO17A3020N	NCCB-KCN	NC13A21BCK	PPJB-LAN	PP19A30AL	SCCA-LAN	SC11A30AL
CKGD-XAN	CO17A3C03N	NCCB-LCN	NC13A21BCL	PPJB-LWN	PP19A30WL	SCCA-LWN	SC11A30WL
CKGD-XCN	CO17A3C20N	NCEB-KCN	NC5A21BCK	RDBA-LAN	RD16A20AL	SCEA-LAN	SC2A30AL
CKIB-XAN	CO19A3003N	NCEB-LCN	NC5A21BCL	RDBA-LWN	RD16A20AW	SCEA-LWN	SC2A30WL
CKIB-XCN	CO19A3020N	NCFB-KCN	NC16A21BCK	RDDA-LAN	RD10A20AL	SCGA-LAN	SC17A30AL
CKID-XAN	CO19A3C03N	NCFB-LCN	NC16A21BCL	RDDA-LWN	RD10A20AW	SCGA-LWN	SC17A30WL
CKID-XCN	CO19A3C20N	NCGB-KCN	NC18A21BCK	RDFA-LAN	RD3A20AL	SCIA-LAN	SC19A30AL
COBA-XCN	CC163A3020N	NCGB-LCN	NC18A21BCL	RDFA-LWN	RD3A20AW	SCIA-LWN	SC19A30WL
CODA-XCN	CC11A3020N	NFBC-KCN	NV162A2S40K	RDHA-LAN	RD16A20AL		
COFA-XCN	CO2A3020N	NFBC-LCN	NV162A2S40L	RDHA-LWN	RD16A20AW		
COHA-XCN	CO17A3003N	NFCC-KCN	NV13A2S48K	RDJA-LAN	RD18A20AL		