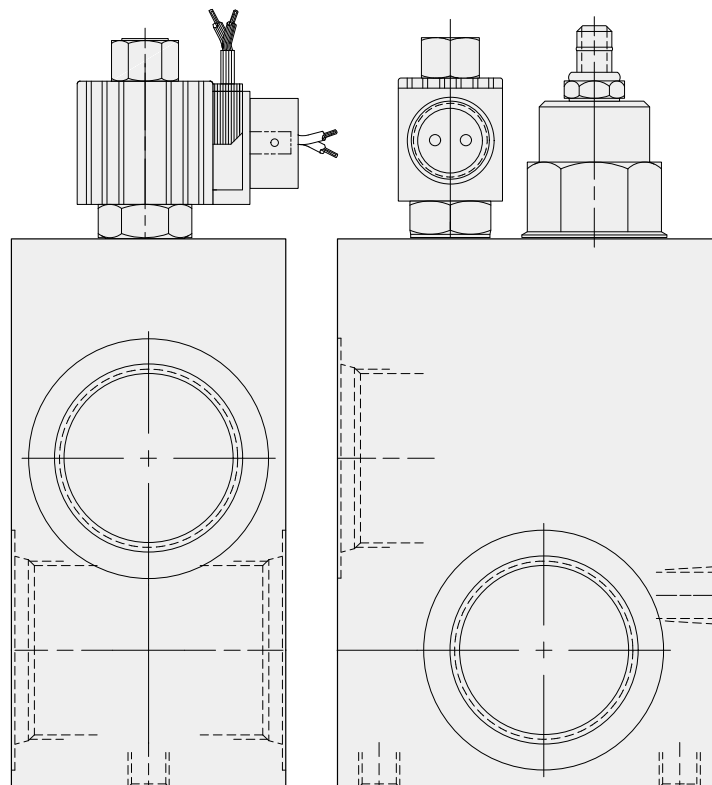


VALVE ASSEMBLY PACKAGES



VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Solenoid Operated Ventable Relief Assembly <i>Normally open</i>		YRCG-LAN-**	13.02	RVCA	1.18
		YREG-LAN-**	13.04	RVEA	1.18
		YRFG-LAN-**	13.06, 13.07	RVGA	1.19
		YRHG-LAN-**	13.10, 13.11	RVIA	1.19
		YROG-LAN-**	13.03	RVCA	1.18
		YRPG-LAN-**	13.05	RVEA	1.18
		YRQG-LAN-**	13.08, 13.09	RVGA	1.19
		YRRG-LAN-**	13.12, 13.13	RVIA	1.19
Solenoid Operated Ventable Relief Assembly <i>Normally Closed</i>		YRCH-LAN-**	13.02	RVCA	1.18
		YREH-LAN-**	13.04	RVEA	1.18
		YRFH-LAN-**	13.06, 13.07	RVGA	1.19
		YRHH-LAN-**	13.10, 13.11	RVIA	1.19
		YROH-LAN-**	13.03	RVCA	1.18
		YRPH-LAN-**	13.05	RVEA	1.18
		YRQH-LAN-**	13.08, 13.09	RVGA	1.19
		YRRH-LAN-**	13.12, 13.13	RVIA	1.19
Solenoid and Pilot Relief Assembly <i>Normally Open</i>		YRAG-LAN-**	13.14	RBAC	1.16
Solenoid and Pilot Relief Assembly <i>Normally Closed</i>		YRAH-LAN-**	13.14	RBAC	1.16
Cross-Port Relief Assembly with Shuttle and Solenoid Operated Vent <i>Normally Open</i>		YVCG-LAN-**	13.15	RVCA	1.18
				CSAB	10.08
		YVEG-LAN-**	13.16	RVEA	1.18
				CSAB	10.08
		YVFG-LAN-**	13.17, 13.18, 13.19	RVGA	1.19
				CSAB	10.08

VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Cross-Port Relief Assembly with Shuttle and Solenoid Operated Vent <i>Normally Closed</i>		YVCH-LAN-**	13.15	RVCA	1.18
				CSAB	10.08
		YVEH-LAN-**	13.16	RVEA	1.18
				CSAB	10.08
		YVFH-LAN-**	13.17, 13.18, 13.19	RVGA	1.19
				CSAB	10.08
Hydrostatic Transmission Assembly		XRDB-LCN-A*	13.20, 13.21	DSCH	10.06
				RDDA	1.10
				RPEC	1.06
		XRFB-LCN-A*	13.22, 13.23	DSEH	10.06
				RDFA	1.10
				RPEC	1.06
		XRHB-LCN-A*	13.24, 13.25	DSGH	10.07
				RDHA	1.11
				RPGC	1.06
		XRJB-LCN-A*	13.26, 13.27	DSIH	10.07
				RDJA	1.11
				RPIC	1.07
Hot Oil Shuttle and Relief Assembly		XRDC-LNN-A*	13.28, 13.29	DSCH	10.06
				RPEC	1.06
		XRFC-LNN-A*	13.30, 13.31	DSEH	10.06
				RPEC	1.06
		XRHC-LNN-A*	13.32, 13.33	DSGH	10.07
				RPGC	1.06
		XRJC-LNN-A*	13.35, 13.36, 13.37	DSIH	10.07
				RPIC	1.07
Flow Divider/Combiner Tractive Drive Assembly		YGCB-XAN-**	13.38	FSCH	7.14
		YGDB-XAN-**	13.39	FSDH	7.14
		YGEB-XAN-**	13.40	FSEH	7.15
		YGFB-XAN-**	13.41	FSFH	7.15



VALVE ASSEMBLY PACKAGE LOCATOR



VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Regeneration Assembly Pressure Sensitive		YDCC-LHN-A*	13.43	CODA	10.12
				CBCA	4.10
		YDEC-LHN-A*	13.44	COFA	10.12
				CBEA	4.10
		YDGC-LHN-A*	13.45	COHA	10.13
				CBGA	4.11
		YDHC-LHN-A*	13.47	COHA (2)	10.13
				CBGA (2)	4.11
		YDJC-LHN-A*	13.48	COJA	10.13
				CBIA	4.11
Regeneration Assembly Pressure Sensitive with Load Locking Pilot Operated Check		YDCD-LHN-A*	13.43	CODA	10.12
				CBCA	4.10
				CKEB	4.16
		YDED-LHN-A*	13.44	COFA	10.12
				CBEA	4.10
				CKEB	4.16
		YDGD-LHN-A*	13.46	COHA	10.13
				CBGA	4.11
				CKGB	4.17
Accumulator Dump Assembly		YCFE-XAN-A*	13.50	CXFA	5.08
				COFA	10.12
		YCHE-XAN-A*	13.51	CXHA	5.09
				CODA	10.12
Pump Circuit Manifold for Multiple Pump Circuits		YFRC-LAN-A*	13.52	CXFA	5.08
				NQEB	10.16
				RPGC	1.06
		YFRE-LAN-A*	13.52	CXHA	5.09
				NQEB	10.16
				RPIC	1.07

VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Pump Circuit Mainfold for Single Pump Circuits		YFRD-LAN-A*	13.53	CXFA	5.08
				NQEB	10.16
				RPGC	1.06
		YFRF-LAN-A*	13.53	CXHA	5.09
				NQEB	10.16
				RPIC	1.07
Priority Flow Control with Controlled Flow Port Relief Valve		YRDR-LAN-**	13.54	FRCA	6.02
				RPEC	1.06
		YREM-LAN-**	13.54	FRDA	6.02
				RPEC	1.06
		YRFF-LAN-**	13.55	FREA	6.03
				RPEC	1.06
		YRHF-LAN-**	13.56	FRFA	6.03
				RPGC	1.06



VALVE ASSEMBLY PACKAGE CROSS REFERENCE CHART



This catalogue contains many new bodies that incorporate a free flow check valve and are designated by a three-position model code. These new products provide a functional replacement, and in most cases a physical replacement, for products that were offered only as valve assemblies in previous catalogues. (A SUN Valve Assembly (or Y Assembly), by definition, contains two or more dissimilar cartridges to provide a specific hydraulic function.)

In all cases where a new body with free flow check is available, it is offered in place of the older configuration valve assemblies that have appeared in previous catalogues. **No models that appeared in previous catalogues have been obsoleted. All previously catalogued products can still be ordered using their original model codes.** However, the preferred method of ordering these products is now as follows: **Old Model Code:** YPEF-ABN-BA, **New Model Code:** Cartridge-PBFC-ABN and **Body**-BB2.

The new method of ordering combines the seven-position cartridge model code (PBFC-ABN) with the three-position body model code (BB2) to create the new valve assembly model code. The cross references that follow detail the differences between older SUN catalogues and this SUN catalogue in regard to valve assemblies.

FUNCTIONAL AND PHYSICAL REPLACEMENTS

Assembly Model Code	Catalogue Code Cartridge Body	Assembly Model Code	Catalogue Code Cartridge Body	Assembly Model Code	Catalogue Code Cartridge Body
YCCD-***-A*	CBCA-***-EM*	YCGH-***-G*	CBGG-***-HN*	YPFJ-BBN-BB	PBHC-BBN-BKJ
YCCD-***-G*	CBCG-***-EM*	YCGH-***-H*	CBGH-***-HN*	YPFK-BBN-BB	PPHC-BBN-BK2
YCCD-***-H*	CBCH-***-EM*	YCHC-***-A*	RPIC-***-IN*	YPGA-***-C*	PBHB-***-H2*
YCCE-***-A*	CBCA-***-EP*	YCJC-***-AS	RPKC-***-LNS	YPGB-***-C*	PBHB-***-H3*
YCCE-***-G*	CBCG-***-EP*	YPCA-***-AA	PBDB-***-EB2	YPGC-***-C*	PPHB-***-H4*
YCCE-***-H*	CBCH-***-EP*	YPCB-***-AA	PBDB-***-EB3	YPGD-***-CA	PBHB-***-HBK
YCCG-***-A*	CBCA-***-EQ*	YPCR-***-AA	PPDB-***-EB3	YPGE-***-CA	PPHB-***-HBK
YCCG-***-G*	CBCG-***-EQ*	YPCS-***-AA	PPDB-***-EB2	YPJA-***-C*	PBJB-***-K2*
YCCG-***-H*	CBCH-***-EQ*	YPDB-***-C*	PBDB-***-E3*	YPJC-***-C*	PPIB-***-K4*
YCCH-***-A*	CBCA-***-EN*	YPDD-***-C*	PPDB-***-E4*	YRCA-***-AA	RPEC-***-FB2
YCCH-***-G*	CBCG-***-EN*	YPDE-***-C*	PPDB-***-E5*	YRDK-***-A*	RPEC-***-FM*
YCCH-***-H*	CBCH-***-EN*	YPEB-***-BA	PBFB-***-BB2	YREC-***-BA	RPGC-***-CB2
YCDC-***-**	RPEC-***-FN*	YPED-***-BA	PBFB-***-BB3	YRER-***-BB	RPGC-***-CJ2
YCED-***-A*	CBEA-***-BM*	YPEE-***-BB	PBFB-***-BJ2	YRFK-***-A*	RPGC-***-CM*
YCED-***-G*	CBEG-***-BM*	YPEF-ABN-BA	PBFC-ABN-BB2	YRHK-***-A*	RPIC-***-IM*
YCED-***-H*	CBEH-***-BM*	YPEG-ABN-BA	PBFC-ABN-BB3	YSCB-***-AA	RSDC-***-EB5
YCEE-***-A*	CBEA-***-BP*	YPEH-ABN-BA	PPFC-ABN-BB2	YSCC-***-AA	RSDC-***-EB4
YCEE-***-G*	CBEG-***-BP*	YPEI-ABN-BA	PPFC-ABN-BB3	YSDB-***-C*	RSDC-***-E7*
YCEE-***-H*	CBEH-***-BP*	YPEL-***-C*	PPFB-***-B4*	YSDC-***-C*	RSDC-***-E8*
YCEG-***-A*	CBEA-***-BQ*	YPEM-***-C*	PPFB-***-B5*	YSEB-***-C*	RSFC-***-B7*
YCEG-***-G*	CBEG-***-BQ*	YPER-***-BA	PPFB-***-BB2	YSEC-***-C*	RSFC-***-B8*
YCEG-***-H*	CBEH-***-BQ*	YPER-***-BA	PPFB-***-BB3	YSEF-***-BA	RSFC-***-BB5
YCEH-***-A*	CBEA-***-BN*	YPET-***-BB	PBFB-***-BJ3	YSEG-***-BA	RSFC-***-BB4
YCEH-***-G*	CBEG-***-BN*	YPEU-ABN-BB	PBFC-ABN-BJ2	YSEI-***-BB	RSFC-***-BJ5
YCEH-***-H*	CBEH-***-BN*	YPEV-ABN-BB	PBFC-ABN-BJ3	YSEL-***-C*	RSFC-***-B6*
YCFC-***-**	RPGC-***-CN*	YPEW-ABN-BB	PPFC-ABN-BJ2	YSEJ-***-BB	RSFC-***-BJ4
YCGD-***-A*	CBGA-***-HM*	YPEX-ABN-BB	PPFC-ABN-BJ3	YSFB-***-AB	RSHC-***-BK4
YCGD-***-G*	CBGG-***-HM*	YPEY-***-BB	PPFB-***-BJ2	YSFC-***-AB	RSHC-***-BK5
YCGD-***-H*	CBGH-***-HM*	YPEZ-***-BB	PPFB-***-BJ3	YSGA-***-CA	RSHC-***-HB4
YCGE-***-A*	CBGA-***-HP*	YPDF-***-C*	PBFB-***-B3*	YSHA-***-C*	RSHC-***-H6*
YCGE-***-G*	CBGG-***-HP*	YPFE-***-AB	PBHB-***-BK2	YSHB-***-C*	RSHC-***-H7*
YCGE-***-H*	CBGH-***-HP*	YPFF-***-AB	PBHB-***-BKJ	YSHC-***-C*	RSJC-***-K8*
YCGG-***-A*	CBGA-***-HQ*	YPIF-***-AB	PPHB-***-BK2		
YCGG-***-G*	CBGG-***-HQ*	YPIH-***-AB	PPHB-***-BKJ		
YCGG-***-H*	CBGH-***-HQ*	YPFI-BBN-BB	PBHC-BBN-BK2		
YCGH-***-A*	CBGA-***-HN*	YPFL-BBN-BB	PPHC-BBN-BKJ		

Continued on next page

FUNCTIONAL ONLY REPLACEMENTS

New nine-position model codes in the following chart are physically different than the old Valve Assembly models. Differences may include physical size as well as port locations, so make sure these products are suitable to your application before ordering.

The new XR** hydrostatic transmission valve assemblies referenced below are not only physically different, but also represent a new design. This new version hydrostatic transmission valve assembly offers superior performance characteristics and greater application flexibility compared to the older version YR** hydrostatic transmission assemblies.

<i>Valve Assembly</i>	<i>Replacement</i>
YPDA-***-**	PBDB-***-E2*
YRDL-LQN-AK	XRDC-LNN-A*
YRDE-LQN-AL	XRDC-LNN-A*
YRDM-LQN-AM	XRFC-LNN-A*
YRDM-LQN-AM	XRFC-LNN-A*
YRGH-LCN-A*	XRFB-LCN-A*
YRGN-LCN-AQ	XRFB-LCN-AQ
YRGP-LCN-A*	XRDB-LCN-A*
YSDA-***-**	RSDC-***-E6*
YPFB-***-**	PBFB-***-B2

NO REPLACEMENT AND NOT IN THIS CATALOGUE

The Valve assemblies listed in the chart below appeared in previous SUN catalogues but do not appear in this catalogue. **These products can still be ordered using the original model code. Contact your distributor for pricing information.**

YCEJ	YFEM	YNEK	YRGD
YDFD	YFEN	YNEM	YRGJ
YFCH	YFEO	YRDC	YRGG
YFCI	YNCF	YREL	YSEH
YFED	YNEJ	YRES	YSEK

This section of the SUN's catalogue includes valve assembly packages designed for specific hydraulic functions. SUN's valve assemblies typically contain two or more different cartridges and provide several hydraulic functions.

Section	Page
<i>Valve Assemblies:</i>	
Solenoid Operated Ventable Relief	13.02–13.13
Solenoid and Relief Pilot Flow	13.14
Cross–Port Relief with Shuttle and Solenoid Operated Vent	13.15–13.19
Hydrostatic Transmission	13.20–13.27
Hot Oil Shuttle and Relief	13.28–13.37
Flow Divider/Combiner Tractive Drive	13.38–13.41
Regeneration	13.42–13.49
Accumulator Dump Circuits	13.50–13.51
Pump Circuits Control	13.52–13.53
Pressure–Compensated Priority Flow Control	13.54–13.56

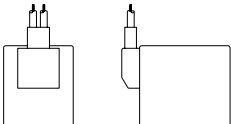
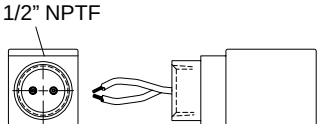
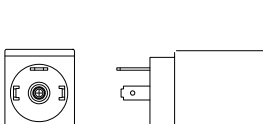
Ordering

Use a nine–digit part number when ordering valve assemblies. You must select a number of different options to complete a part number.

We have supplied pricing in Sun's most recent Price List for a basic part number that gives you a configuration that provides the required performance characteristics for the majority of applications. If you desire to change a cartridge option (controls or adjustment range) in a valve assembly, we have provided you with the cartridge page number for those cartridges where we allow option substitution.

Designated cartridge option pricing must be added to (or subtracted from) the basic pricing to obtain the complete pricing of the valve assembly. Like all other mounting configurations in this catalogue, all valve assemblies are available in both aluminium and SG iron with a variety of porting options. Consult Sun's most recent Price List for basic prices and option prices.

Electrical Connector Options for Solenoid Operated Assemblies

WIRE LEADS	CONDUIT	ISO/DIN
 18 Gauge 0,6 meter Long J–12 V DC–6 metre Leads K–24 V DC–6 metre Leads	 1/2" NPTF 18 Gauge 0,6 meter Long N–115 V 50/60hz–Conduit O–230 V 50/60hz–Conduit	 DIN 43650 Plug Face S–12 V DC ISO/DIN T–24 V DC ISO/DIN V–230 V 50/60hz ISO/DIN W 120 V 50/60Hz ISO/DIN



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY INLINE BODY WITH GAUGE PORT

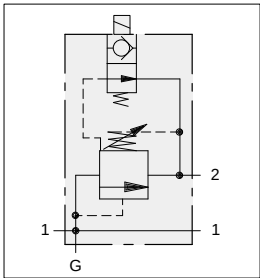


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

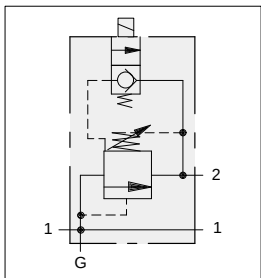
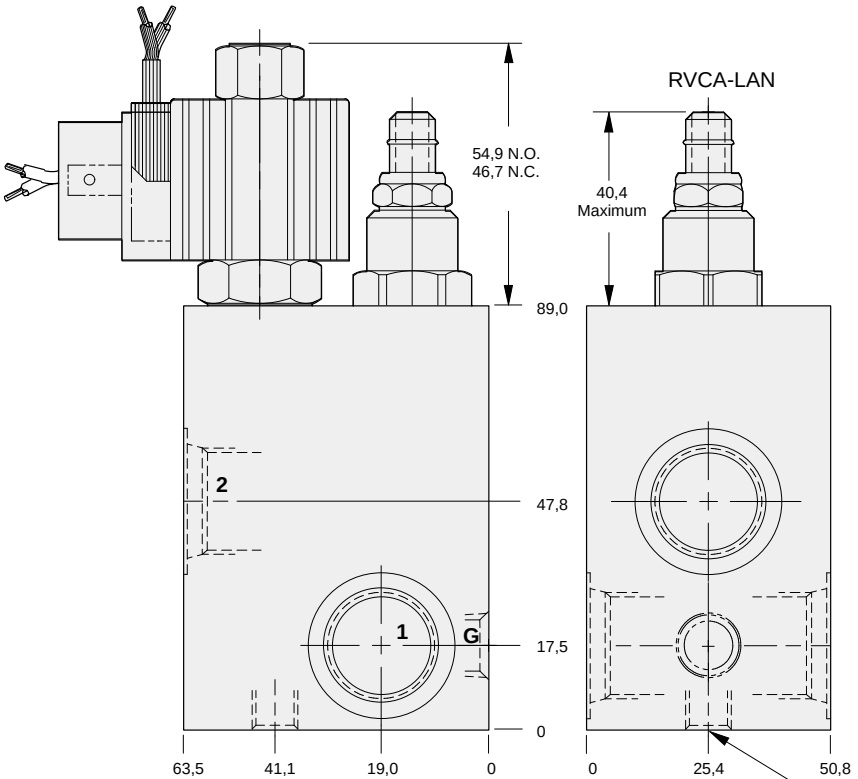
YRCG: Normally Open

YRCH: Normally Closed

ALUMINIUM		SG IRON		Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price			Port Code	List Price	Port Code	List Price
A		A/S		.25 NPTF	.25 NPTF	A		A/S	
B		B/S		.375 NPTF	.25 NPTF	B		B/S	
C		C/S		.50 NPTF	.25 NPTF	C		C/S	
I		I/S		SAE-6	.25 NPTF	I		I/S	
J		J/S		SAE-8	.25 NPTF	J		J/S	
K		K/S		SAE-10	.25 NPTF	K		K/S	
T		T/S		.25 BSPP	.25 BSPP	T		T/S	
U		U/S		.375 BSPP	.25 BSPP	U		U/S	
V		V/S		.50 BSPP	.25 BSPP	V		V/S	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

Mounting Hole:
Inch: .375-16 UNC-2B
x 15,7 deep.
Metric: M10 x 1.50-6H
x 15,7 deep.

OPTIONS

YRC* - LAN

**

G Normally Open

H Normally Closed

CARTRIDGE

RVCA Pg 1.18

For Viton Seals Change
LAN to LAV.

Customer Specified Setting
Stamped on Hex

SOLENOID COILS

J 12 volt DC,
0,6 metre leads

K 24 volt DC,
0,6 metre leads

N 115 volt, 50/60 Hz,
conduit

O 230 volt, 50/60 Hz,
conduit

S 12 volt DC,
ISO/DIN

T 24 volt DC,
ISO/DIN

V 230 volt, 50/60 Hz,
ISO/DIN

W 120 volt, 50/60 Hz,
ISO/DIN

PORTS

See Chart
above



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY .75" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT

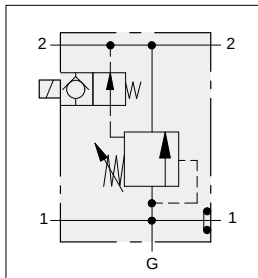


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

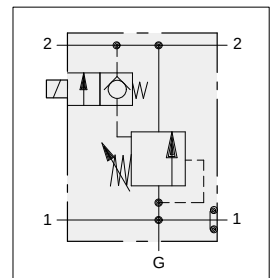
YROG: Normally Open

YROH: Normally Closed

ALUMINIUM		SG IRON		Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
C		C/S		Inch	.50 NPTF	.25 NPTF	C		C/S	
K		K/S		Inch	SAE-10	.25 NPTF	K		K/S	
V/M		V/T		Metric	.50 BSPP	.25 BSPP	V/M		V/T	

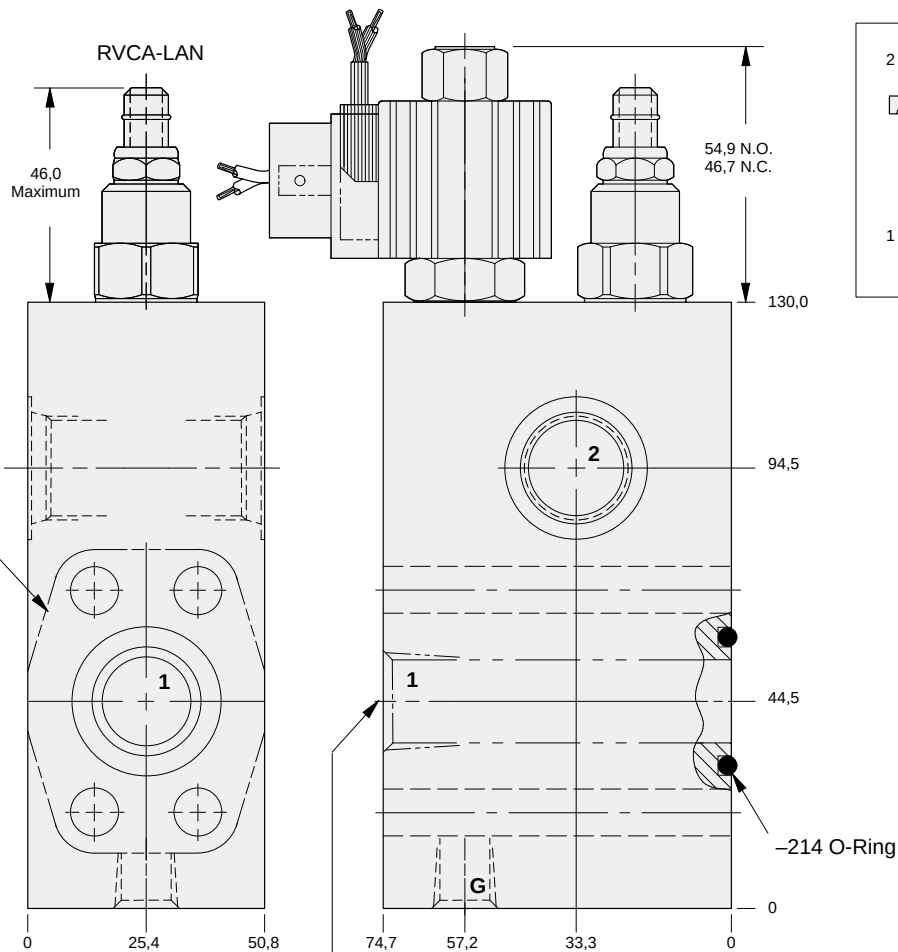


Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

.75" SAE Code 61
4-Bolt Flange Pattern
2 places.



NOTE: Only Code C body has .50 NPTF outlet at port 1.

OPTIONS

YRO* - LAN - **

G Normally Open

CARTRIDGE

RVCA Pg. 1.18

H Normally Closed

For Viton Seals Change
LAN to LAV.

Customer Specified Setting
Stamped on Hex

J 12 volt DC,
0,6 metre leads

K 24 volt DC,
0,6 metre leads

N 115 volt, 50/60 Hz,
conduit

O 230 volt, 50/60 Hz,
conduit

S 12 volt DC,
ISO/DIN

SOLENOID COILS

T 24 volt DC,
ISO/DIN

V 230 volt, 50/60 Hz,
ISO/DIN

W 120 volt, 50/60 Hz,
ISO/DIN

PORTS

See Chart
above



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY INLINE BODY WITH GAUGE PORT

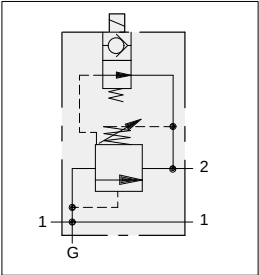


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

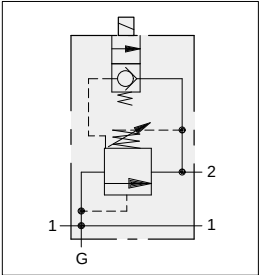
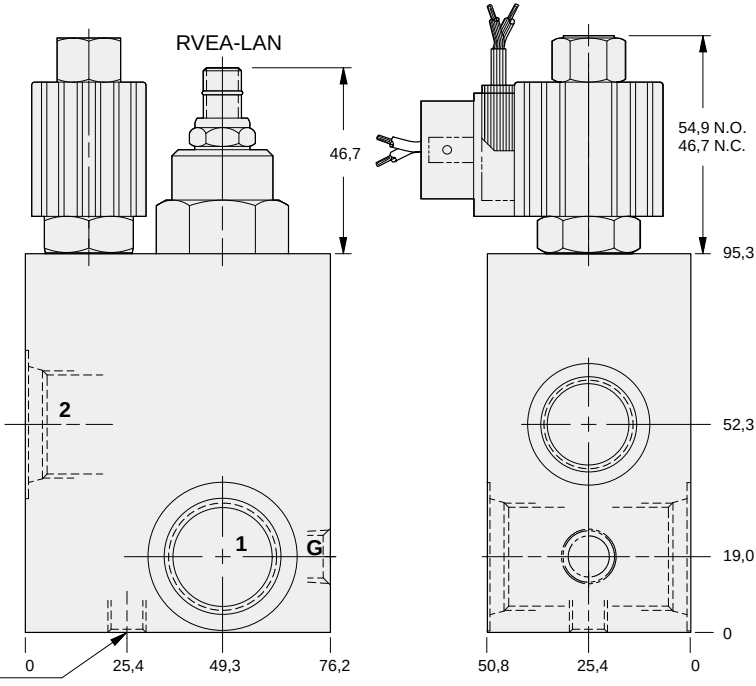
YREG: Normally Open

YREH: Normally Closed

ALUMINIUM		SG IRON		Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
A		A/S		Inch	.25 NPTF	.25 NPTF	A		A/S	
B		B/S		Inch	.375 NPTF	.25 NPTF	B		B/S	
C		C/S		Inch	.50 NPTF	.25 NPTF	C		C/S	
D		D/S		Inch	.75 NPTF	.25 NPTF	D		D/S	
I		I/S		Inch	SAE-6	.25 NPTF	I		I/S	
J		J/S		Inch	SAE-8	.25 NPTF	J		J/S	
K		K/S		Inch	SAE-10	.25 NPTF	K		K/S	
L		L/S		Inch	SAE-12	.25 NPTF	L		L/S	
T		T/S		Metric	.25 BSPP	.25 BSPP	T		T/S	
U		U/S		Metric	.375 BSPP	.25 BSPP	U		U/S	
V		V/S		Metric	.50 BSPP	.25 BSPP	V		V/S	
W		W/S		Metric	.75 BSPP	.25 BSPP	W		W/S	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

OPTIONS

YRE * - LAN - **

CARTRIDGE		SOLENOID COILS		PORTS
G	H	J	K	
Normally Open	Normally Closed	12 volt DC, 0,6 metre leads	24 volt DC, 0,6 metre leads	See Chart above
		N 115 volt, 50/60 Hz, conduit	O 230 volt, 50/60 Hz, conduit	
		S 12 volt DC, ISO/DIN	T 24 volt DC, ISO/DIN	
			V 230 volt, 50/60 Hz, ISO/DIN	
			W 120 volt, 50/60 Hz, ISO/DIN	



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY 1.00"SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT



- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

YRPG: Normally Open

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
D		D/S	
L		L/S	
W/M		W/T	

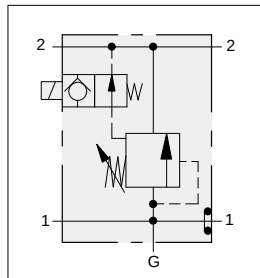
Mounting
Hole
Dimensions

Port 2

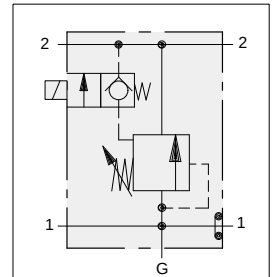
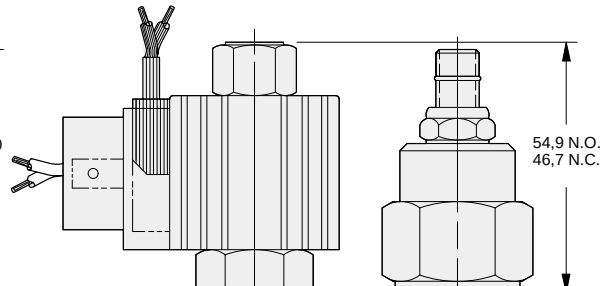
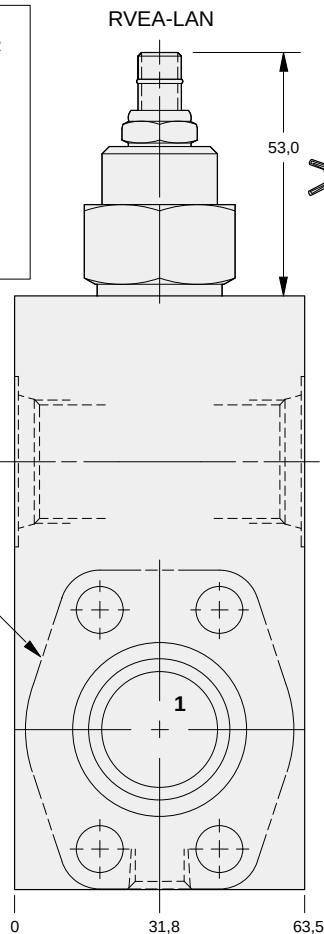
Gauge
Port

YRPH: Normally Closed

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
D		D/S	
L		L/S	
W/M		W/T	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

NOTE: Only Code D body has .75 NPTF outlet at port 1.



13

OPTIONS

YRP * - LAN - **

G Normally Open
H Normally Closed

CARTRIDGE

RVEA Pg 1.18
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

J 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

T 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS
See Chart
above



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY INLINE BODY WITH GAUGE PORT



- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

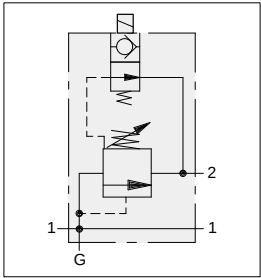
YRFG: Normally Open

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
D		D/S	
E		E/S	
F		F/S	
L		L/S	
M		M/S	
N		N/S	
W		W/S	
X		X/S	
Y		Y/S	

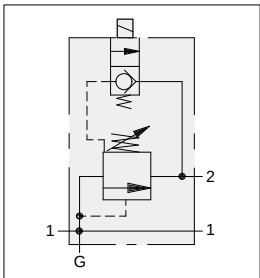
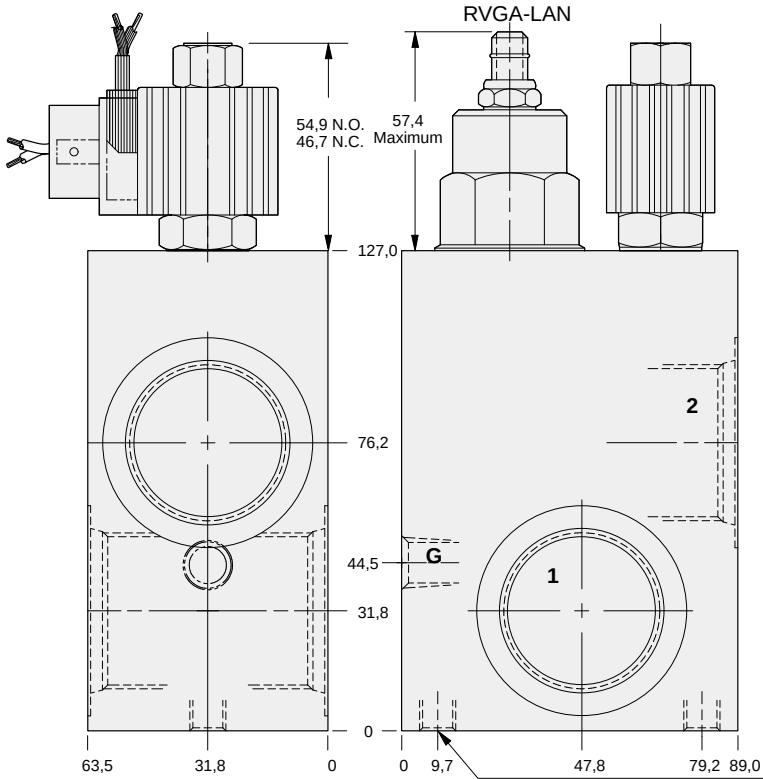
YRFH: Normally Closed

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
D		D/S	
E		E/S	
F		F/S	
L		L/S	
M		M/S	
N		N/S	
W		W/S	
X		X/S	
Y		Y/S	

Ports 1 & 2	Gauge Port
.75 NPTF	.25 NPTF
1.00 NPTF	.25 NPTF
1.25 NPTF	.25 NPTF
SAE-12	.25 NPTF
SAE-16	.25 NPTF
SAE-20	.25 NPTF
.75 BSPP	.25 BSPP
1.00 BSPP	.25 BSPP
1.25 BSPP	.25 BSPP



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



OPTIONS

YRF * - LAN - **

CARTRIDGE		SOLENOID COILS		PORTS
G Normally Open	RVGA Pg 1.19	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN	See Chart above
H Normally Closed	For Viton Seals Change LAN to LAV.	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN	
	Customer Specified Setting Stamped on Hex	N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN	
		O 230 volt, 50/60 Hz, conduit		
		S 12 volt DC, ISO/DIN		



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY SAE CODE 61 FLANGE PORT BODY



- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

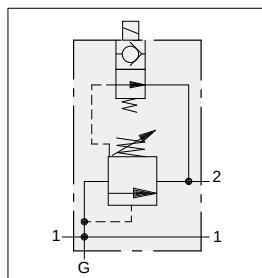
YRFG: Normally Open

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
P		P/S	
P/M		P/T	
Q		Q/S	
Q/M		Q/T	

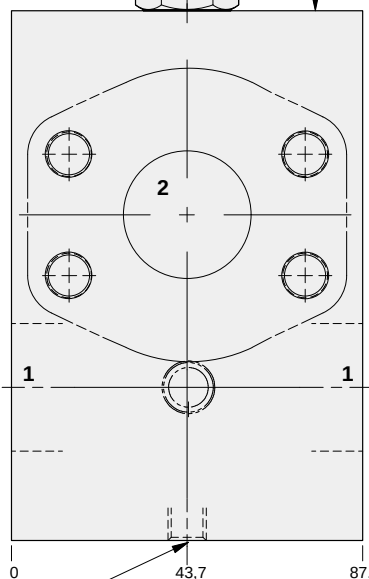
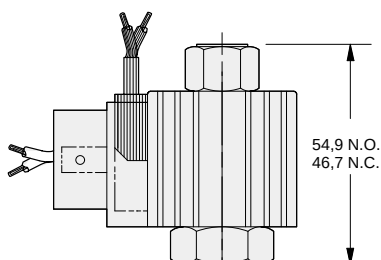
Mounting Hole Dimensions	Port Size	Gauge Port
Inch	1.00	.25 NPTF
Metric	1.00	.25 BSPP
Inch	1.25	.25 NPTF
Metric	1.25	.25 BSPP

YRFH: Normally Closed

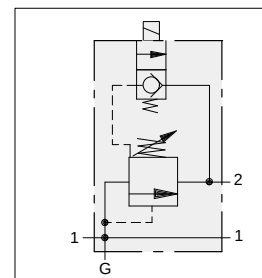
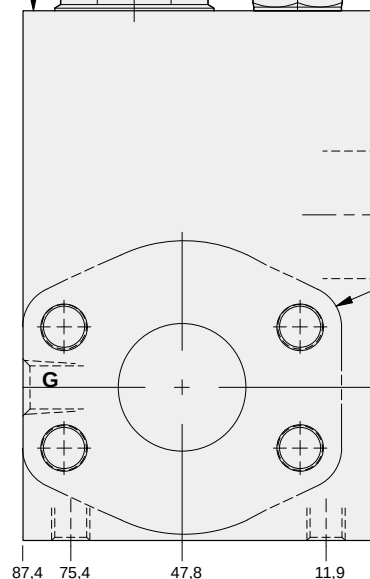
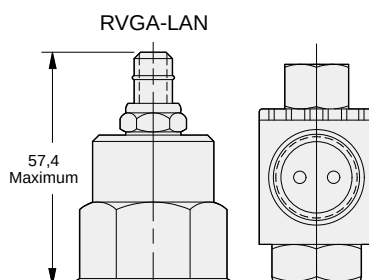
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
P		P/S	
P/M		P/T	
Q		Q/S	
Q/M		Q/T	



Normally Open Solenoid Valve



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



Normally Closed Solenoid Valve

SAE Code 61
4-Bolt Flange Pattern
3 places.

OPTIONS

YRF * - LAN - **

G Normally Open
H Normally Closed

CARTRIDGE

RVGA Pg 1.19
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

J 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

T 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS
See Chart
above



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY

1.25" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT

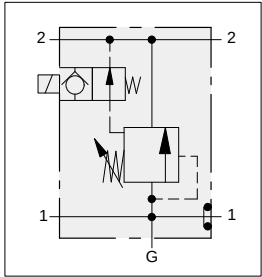


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

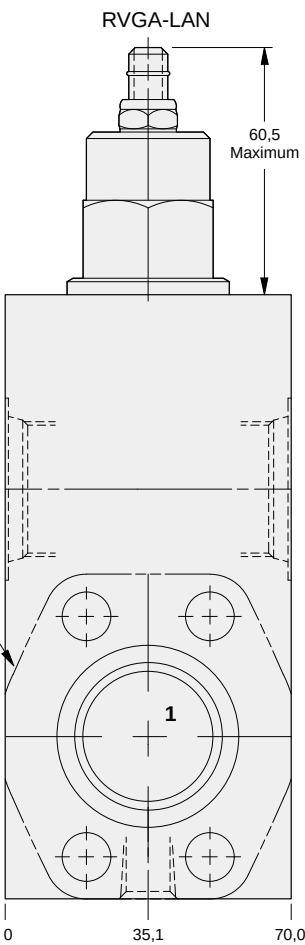
YRQG: Normally Open

YRQH: Normally Closed

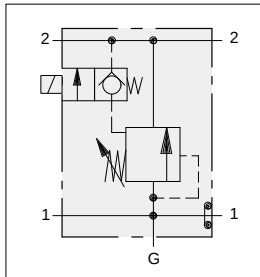
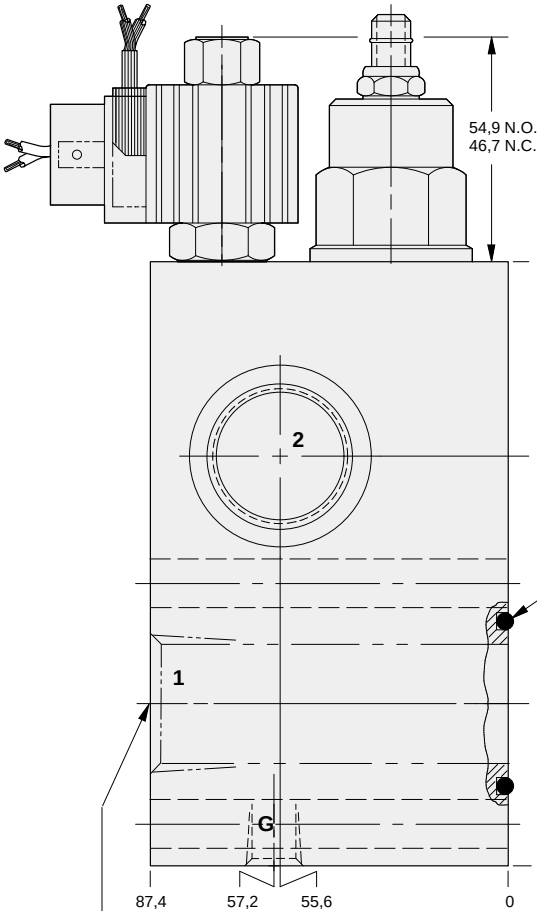
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
E		E/S		Inch	1.00 NPTF	.25 NPTF	E		E/S	
M		M/S		Inch	SAE-16	.25 NPTF	M		M/S	
X/X		X/S		Metric	1.00 BSPP	.25 BSPP	X/X		X/S	



Normally Open
Solenoid Valve



1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.



Normally Closed
Solenoid Valve

NOTE: Only Code E body has 1.00 NPTF outlet at port 1.

OPTIONS

YRQ* - LAN

**

CARTRIDGE		SOLENOID COILS		PORTS	
G Normally Open	RVGA Pg 1.19	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN	See Chart above	
H Normally Closed	For Viton Seals Change LAN to LAV.	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN		
	Customer Specified Setting Stamped on Hex	N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN		
		O 230 volt, 50/60 Hz, conduit			
		S 12 volt DC, ISO/DIN			



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY 1.25" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT



- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

YRQG: Normally Open

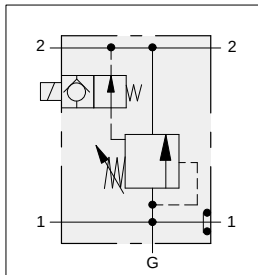
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
Q		Q/S	
Q/M		Q/T	

Mounting Hole Dimensions
Inch .25 NPTF
Metric .25 BSPP

Gauge Port

YRQH: Normally Closed

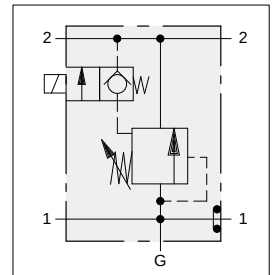
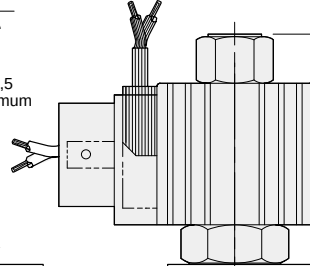
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
Q		Q/S	
Q/M		Q/T	



Normally Open Solenoid Valve

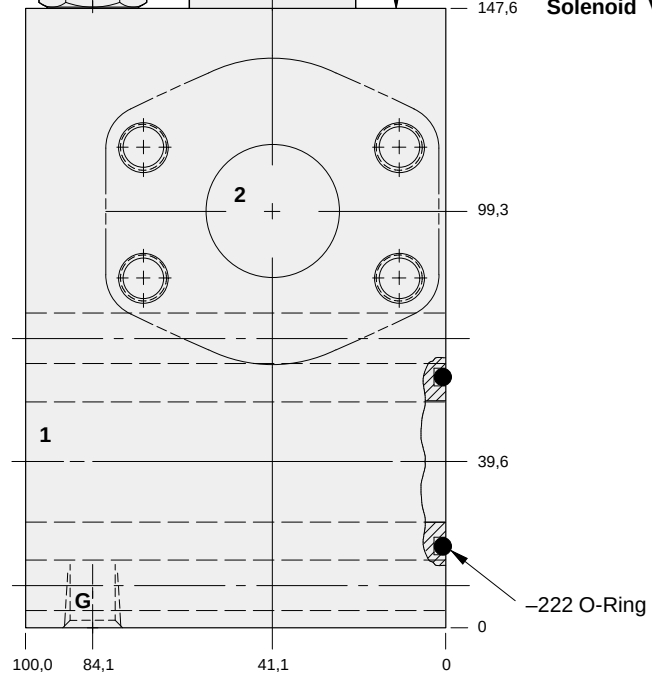
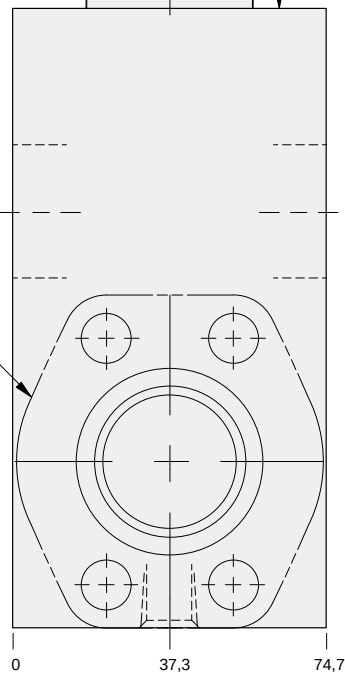
RVGA-LAN

60,5
Maximum



Normally Closed Solenoid Valve

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places.
Port 1 through hole
Port 2 through hole



OPTIONS

YRQ* - LAN - **

G Normally Open
H Normally Closed

CARTRIDGE

RVGA Pg 1.19
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

J 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

T 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS

See Chart
above



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY 1.50" SAE CODE 61 FLANGE PORT BODY WITH GAUGE PORT



- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

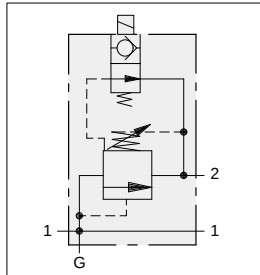
YRHG: Normally Open

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
R		R/S	
R/M		R/T	

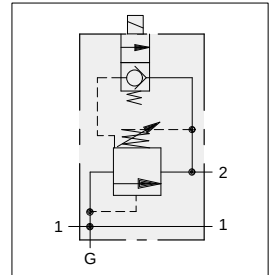
Mounting Hole Dimensions	Gauge Port
Inch	.25 NPTF
Metric	.25 BSPP

YRHH: Normally Closed

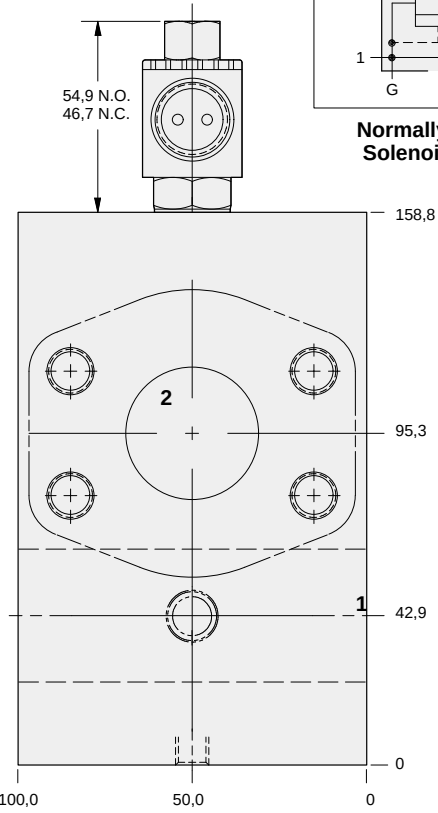
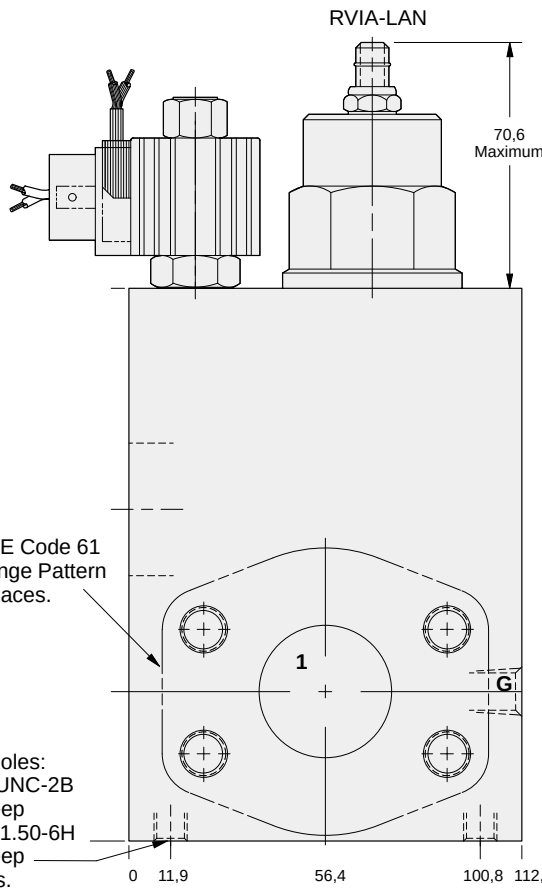
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
R		R/S	
R/M		R/T	



Normally Open Solenoid Valve



Normally Closed Solenoid Valve



OPTIONS

YRH* - LAN - **

CARTRIDGE		SOLENOID COILS		PORTS
G Normally Open	RVIA Pg 1.19	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN	See Chart above
H Normally Closed	For Viton Seals Change LAN to LAV.	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN	
	Customer Specified Setting Stamped on Hex	N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN	
		O 230 volt, 50/60 Hz, conduit		
		S 12 volt DC, ISO/DIN		



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY 2.00" SAE CODE 61 FLANGE PORT BODY WITH GAUGE PORT

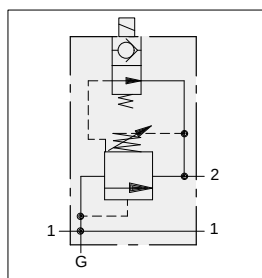


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

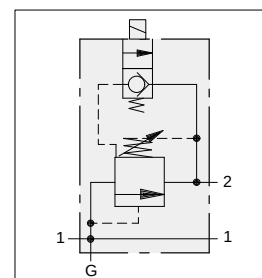
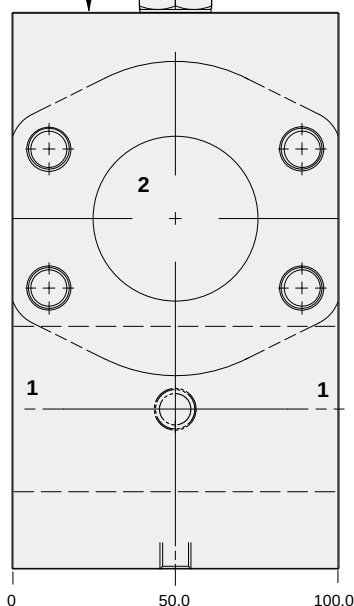
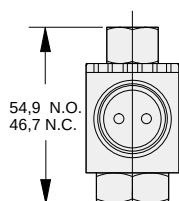
YRHG: Normally Open

YRHH: Normally Closed

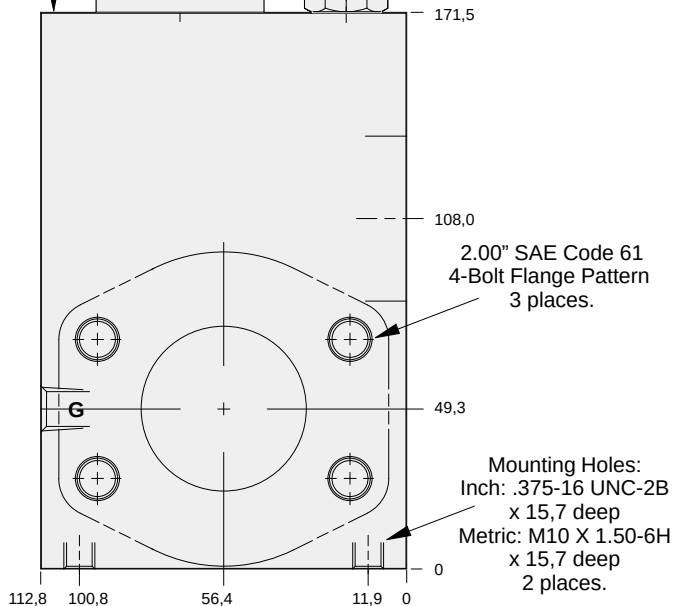
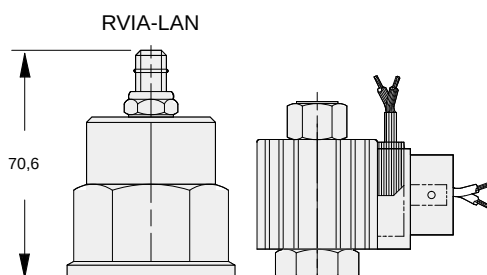
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price			Port Code	List Price	Port Code	List Price
S		S/S		Inch	.25 NPTF	S		S/S	
S/M		S/T		Metric	.25 BSPP	S/M		S/T	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve



13

OPTIONS

YRH* - LAN - **

- G** Normally Open
H Normally Closed

CARTRIDGE

RVIA Pg 1.19
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

- J** 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

- T** 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS
See Chart
above



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
1.50" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT

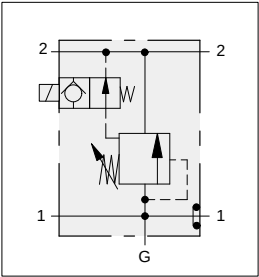


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

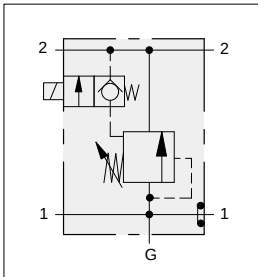
YRRG: Normally Open

YRRH: Normally Closed

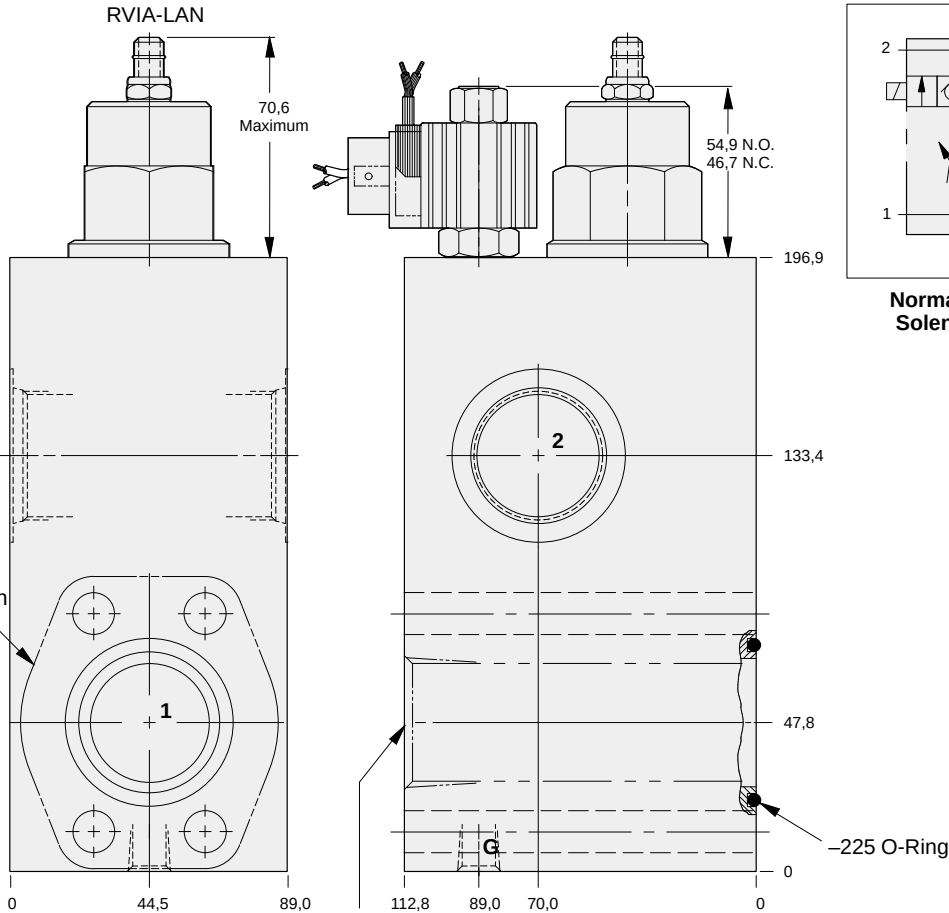
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
F		F/S		Inch	1.25 NPTF	.25 NPTF	F		F/S	
N		N/S		Inch	SAE-20	.25 NPTF	N		N/S	
Y/Y		Y/S		Metric	1.25 BSPP	.25 BSPP	Y/Y		Y/S	



**Normally Open
Solenoid Valve**



**Normally Closed
Solenoid Valve**



NOTE: Only Code F body has 1.25 NPTF outlet at port 1.



OPTIONS

YRR* - LAN - **

CARTRIDGE		SOLENOID COILS		PORTS
G Normally Open	RVIA Pg 1.19	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN	See Chart above
H Normally Closed	For Viton Seals Change LAN to LAV.	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN	
	Customer Specified Setting Stamped on Hex	N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN	
		O 230 volt, 50/60 Hz, conduit		
		S 12 volt DC, ISO/DIN		



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY 1.50" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT

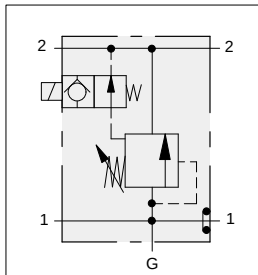


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

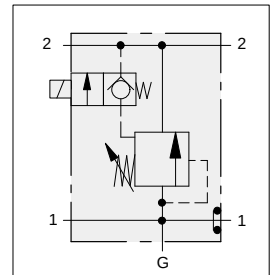
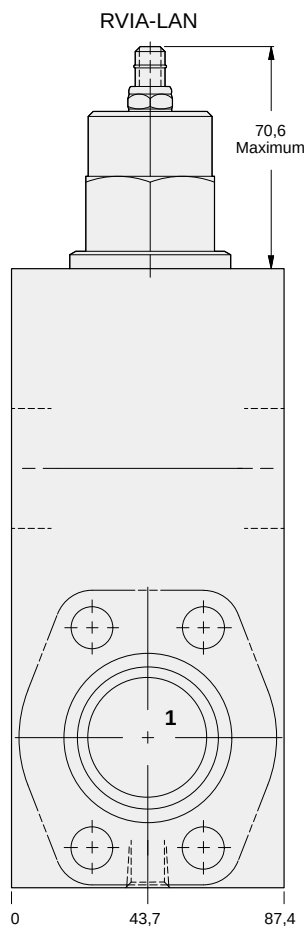
YRRG: Normally Open

YRRH: Normally Closed

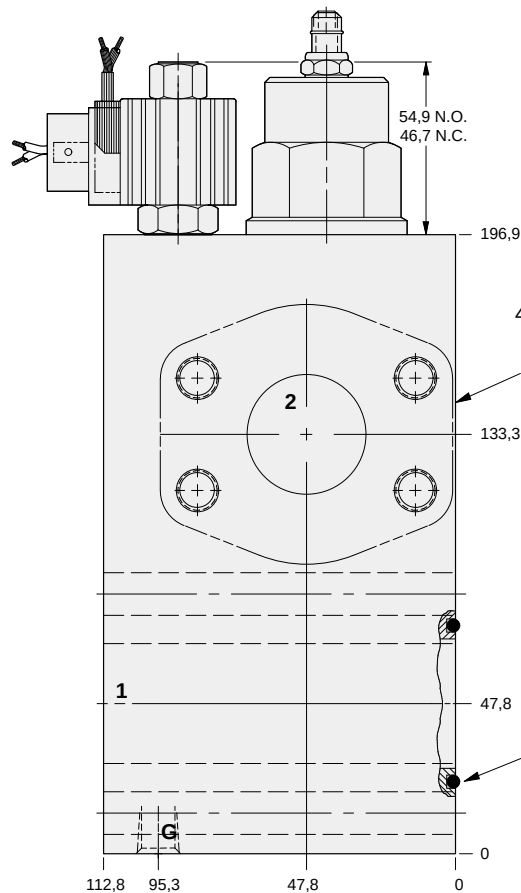
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price			Port Code	List Price	Port Code	List Price
R		R/S		Inch	.25 NPTF	R		R/S	
R/M		R/T		Metric	.25 BSPP	R/M		R/T	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve



1.50" SAE Code 61
4-Bolt Flange Pattern
3 places.
Port 1 through hole
Port 2 through hole

-225 O-Ring

OPTIONS

YRR* - LAN - **

G Normally Open
H Normally Closed

CARTRIDGE

RVIA Pg 1.19
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

J 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

T 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS
See Chart
above



SOLENOID AND RELIEF PILOT CONTROL ASSEMBLY FOR PILOT FLOW USE ONLY (1 L/min maximum flow)

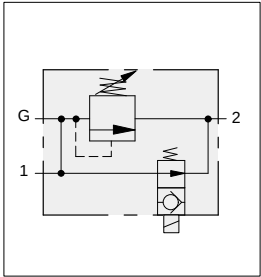


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

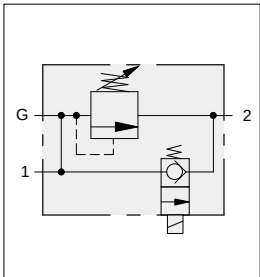
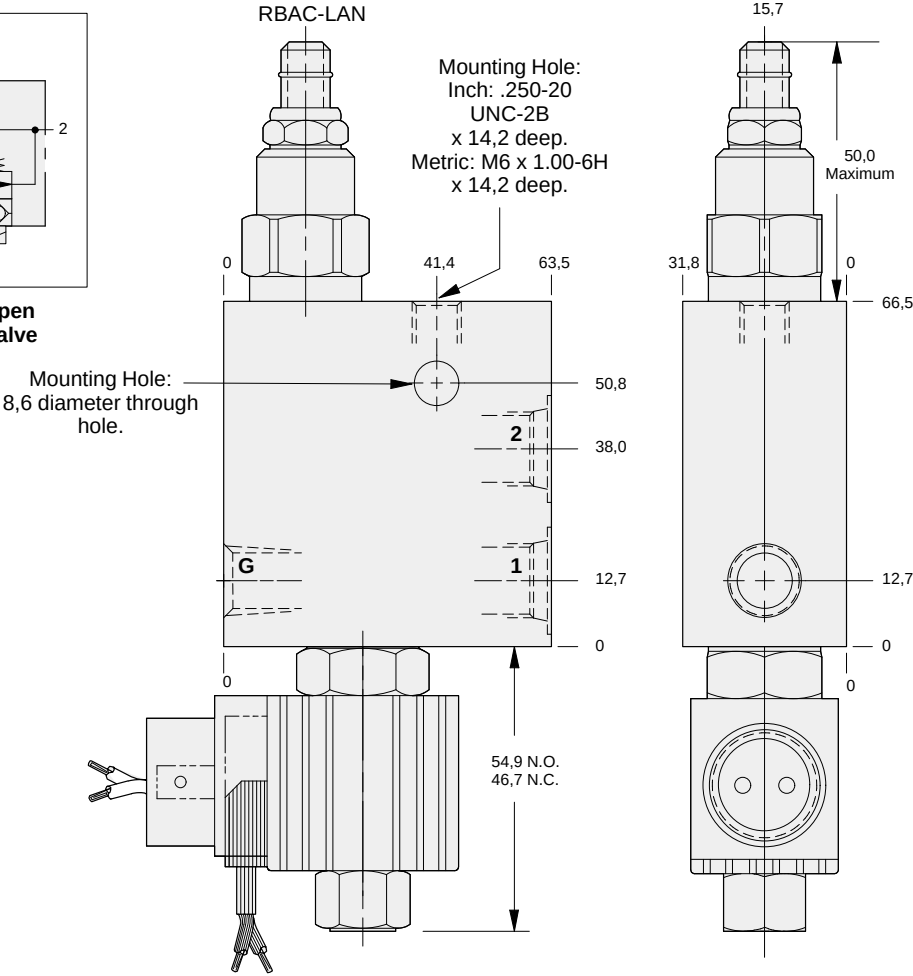
YRAG: Normally Open

YRAH: Normally Closed

ALUMINIUM		SG IRON		Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
A		A/S					A		A/S	
I		I/S					I		I/S	
T		T/S		Inch	.25 NPTF	.25 NPTF	T		T/S	
				Inch	SAE-6	.25 NPTF				
				Metric	.25 BSPP	.25 BSPP				



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

OPTIONS

YRA * - LAN

**

CARTRIDGE			SOLENOID COILS		PORTS		
G	Normally Open	RBAC Pg 1.16	J	12 volt DC, 0,6 metre leads	T	24 volt DC, ISO/DIN	See Chart above
	H	Normally Closed	For Viton Seals Change LAN to LAV.		K	24 volt DC, 0,6 metre leads	
		Customer Specified Setting Stamped on Hex	N	115 volt, 50/60 H _z , conduit	V	230 volt, 50/60 H _z , ISO/DIN	
			O	230 volt, 50/60 H _z , conduit	W	120 volt, 50/60 H _z , ISO/DIN	
			S	12 volt DC, ISO/DIN			



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

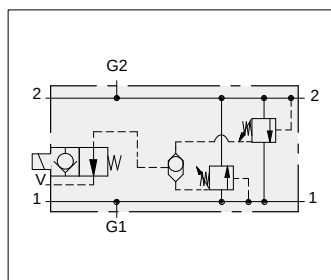


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

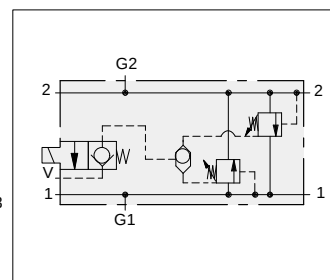
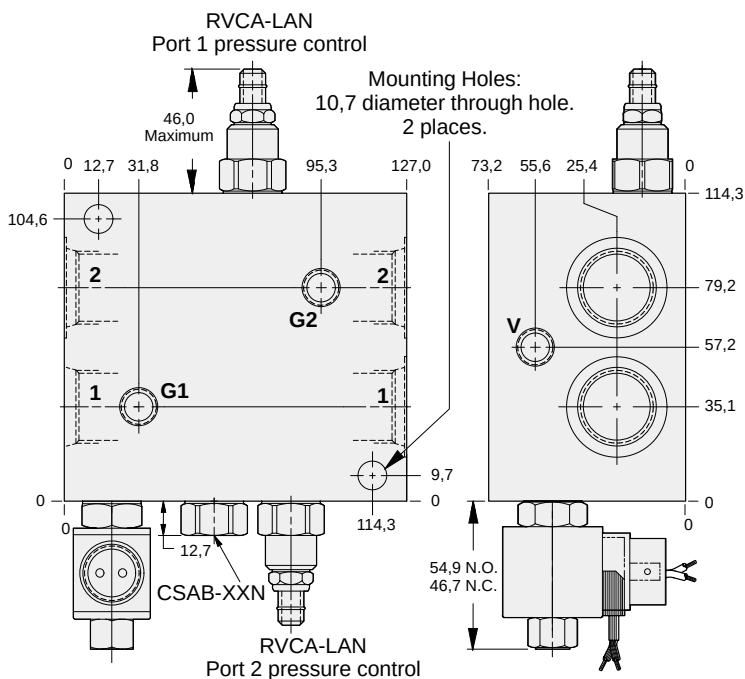
YVCG: Normally Open

YVCH: Normally Closed

ALUMINIUM		SG IRON		Ports 1 & 2	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
A		A/S		.25 NPTF	.25 NPTF	.25 NPTF	A		A/S	
B		B/S		.375 NPTF	.25 NPTF	.25 NPTF	B		B/S	
C		C/S		.50 NPTF	.25 NPTF	.25 NPTF	C		C/S	
D		D/S		.75 NPTF	.25 NPTF	.25 NPTF	D		D/S	
I		I/S		SAE-6	SAE-6	.25 NPTF	I		I/S	
J		J/S		SAE-8	SAE-6	.25 NPTF	J		J/S	
K		K/S		SAE-10	SAE-6	.25 NPTF	K		K/S	
L		L/S		SAE-12	SAE-6	.25 NPTF	L		L/S	
T		T/S		.25 BSPP	.25 BSPP	.25 BSPP	T		T/S	
U		U/S		.375 BSPP	.25 BSPP	.25 BSPP	U		U/S	
V		V/S		.50 BSPP	.25 BSPP	.25 BSPP	V		V/S	
W		W/S		.75 BSPP	.25 BSPP	.25 BSPP	W		W/S	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

OPTIONS

YVC * - LAN **

- G** Normally Open
H Normally Closed

CARTRIDGE

RVCA Pg 1.18
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

- J** 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

- T** 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS
See Chart
above



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

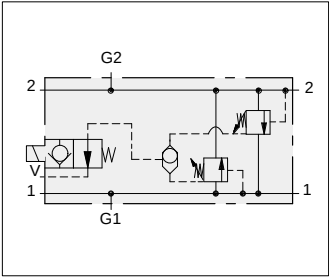


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

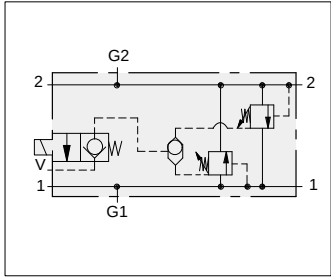
YVEG: Normally Open

YVEH: Normally Closed

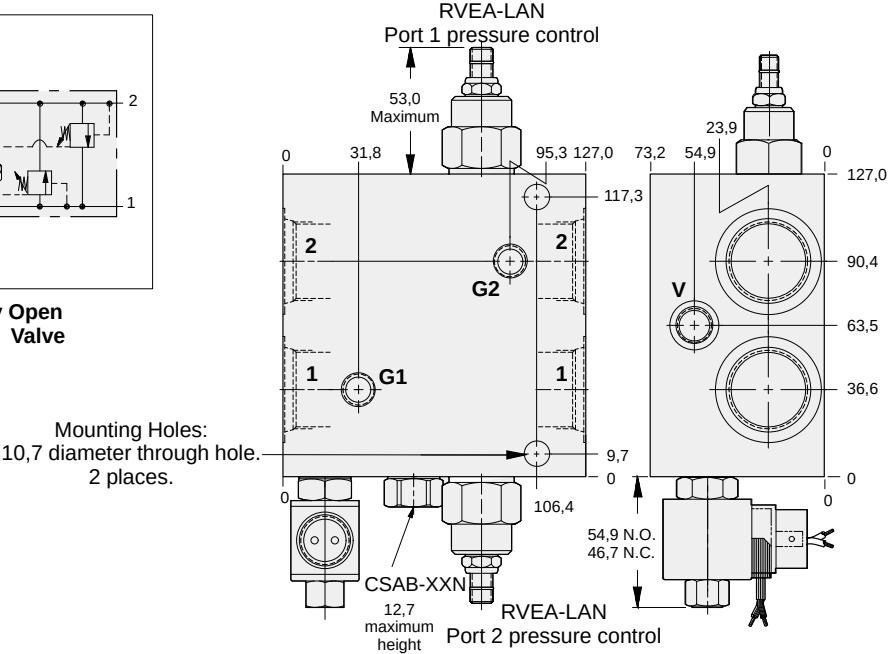
ALUMINIUM		SG IRON		Ports 1 & 2	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
B		B/S		.375 NPTF	.25 NPTF	.25 NPTF	B		B/S	
C		C/S		.50 NPTF	.25 NPTF	.25 NPTF	C		C/S	
D		D/S		.75 NPTF	.25 NPTF	.25 NPTF	D		D/S	
E		E/S		1.00 NPTF	.25 NPTF	.25 NPTF	E		E/S	
I		I/S		SAE-6	SAE-6	.25 NPTF	I		I/S	
J		J/S		SAE-8	SAE-6	.25 NPTF	J		J/S	
K		K/S		SAE-10	SAE-6	.25 NPTF	K		K/S	
L		L/S		SAE-12	SAE-6	.25 NPTF	L		L/S	
M		M/S		SAE-16	SAE-6	.25 NPTF	M		M/S	
U		U/S		.375 BSPP	.25 BSPP	.25 BSPP	U		U/S	
V		V/S		.50 BSPP	.25 BSPP	.25 BSPP	V		V/S	
W		W/S		.75 BSPP	.25 BSPP	.25 BSPP	W		W/S	
X		X/S		1.00 BSPP	.25 BSPP	.25 BSPP	X		X/S	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve



OPTIONS

YVE * - LAN

**

CARTRIDGE		SOLENOID COILS		PORTS
G	Normally Open	RVEA	Pg 1.18	
H	Normally Closed	For Viton Seals Change LAN to LAV.		See Chart above
		Customer Specified Setting Stamped on Hex		
		J	12 volt DC, 0,6 metre leads	
		K	24 volt DC, 0,6 metre leads	
		N	115 volt, 50/60 Hz, conduit	
		O	230 volt, 50/60 Hz, conduit	
		S	12 volt DC, ISO/DIN	
		T	24 volt DC, ISO/DIN	
		V	230 volt, 50/60 Hz, ISO/DIN	
		W	120 volt, 50/60 Hz, ISO/DIN	



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT



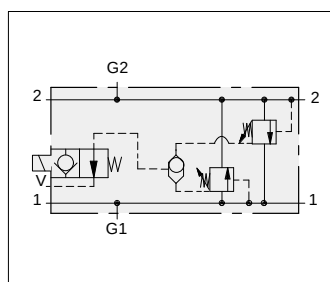
- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

YVFG: Normally Open

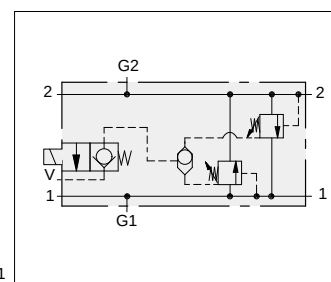
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
D		D/S	
E		E/S	
F		F/S	
L		L/S	
M		M/S	
N		N/S	
W		W/S	
X		X/S	
Y		Y/S	

YVFH: Normally Closed

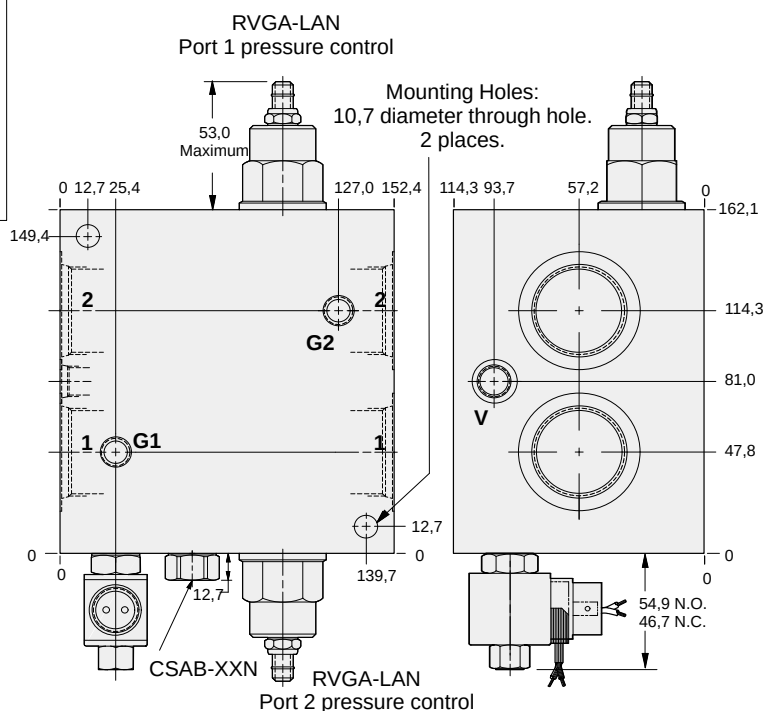
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
D		D/S	
E		E/S	
F		F/S	
L		L/S	
M		M/S	
N		N/S	
W		W/S	
X		X/S	
Y		Y/S	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve



OPTIONS

YVF * - LAN **

- G** Normally Open
H Normally Closed

CARTRIDGE

RVGA Pg 1.19
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

- J** 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

- T** 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS

See Chart
above



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT



- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

YVFG: Normally Open

ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
P		P/S	
P/M		P/T	

Mounting
Hole
Dimensions

Port V

Ports
G1 & G2

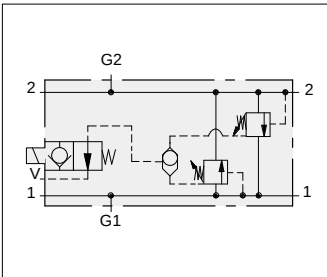
Inch
Metric

SAE-6
.25 BSPP

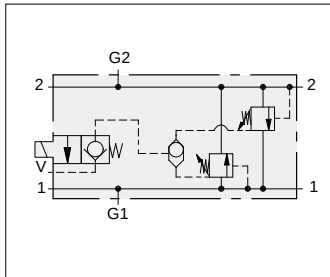
.25 NPTF
.25 BSPP

YVFH: Normally Closed

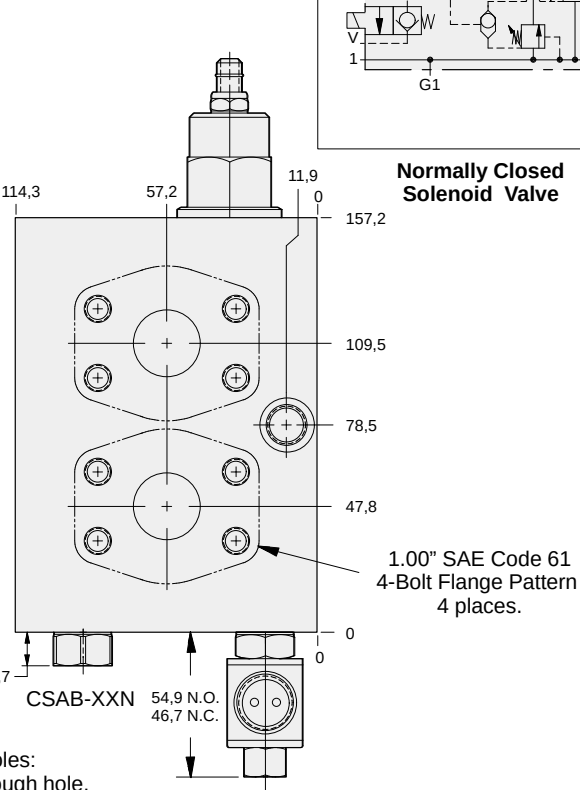
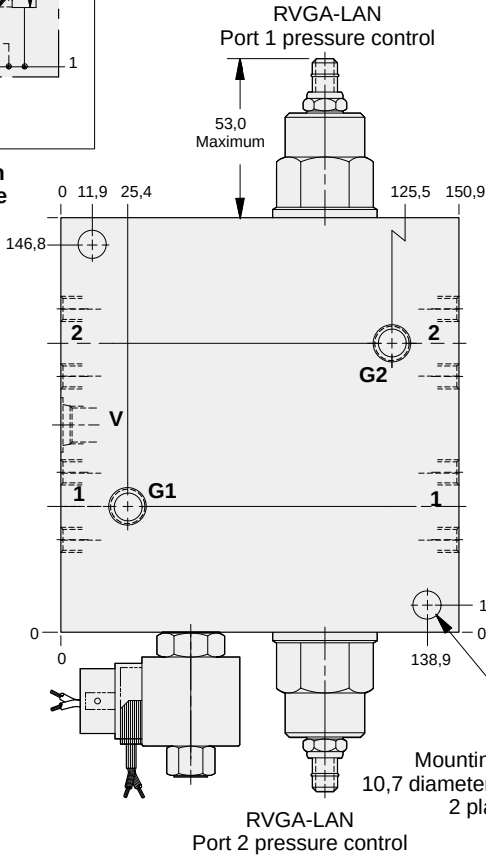
ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price
P		P/S	
P/M		P/T	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve



OPTIONS

YVF * - LAN - **

- G** Normally Open
H Normally Closed

CARTRIDGE

RVGA Pg 1.19
For Viton Seals Change
LAN to LAV.
Customer Specified Setting
Stamped on Hex

SOLENOID COILS

- J** 12 volt DC,
0,6 metre leads
K 24 volt DC,
0,6 metre leads
N 115 volt, 50/60 Hz,
conduit
O 230 volt, 50/60 Hz,
conduit
S 12 volt DC,
ISO/DIN

- T** 24 volt DC,
ISO/DIN
V 230 volt, 50/60 Hz,
ISO/DIN
W 120 volt, 50/60 Hz,
ISO/DIN

PORTS
See Chart
above

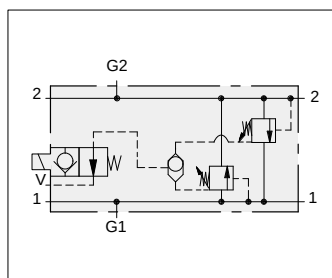
CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

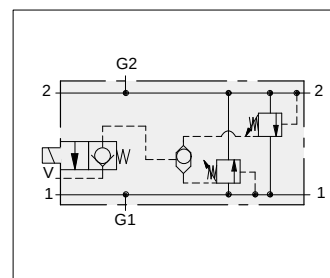
YVFG: Normally Open

YVFH: Normally Closed

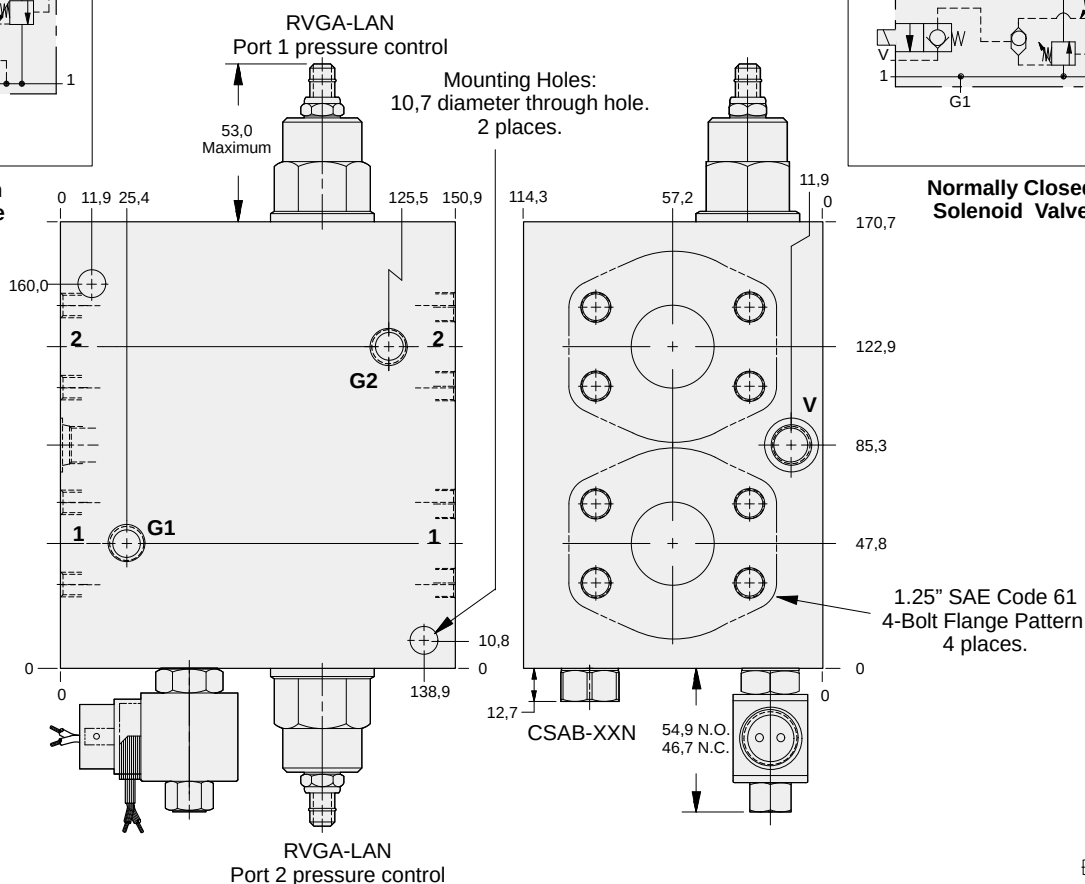
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
Q		Q/S		Inch	SAE-6	.25 NPTF	Q		Q/S	
Q/M		Q/T		Metric	.25 BSPP	.25 BSPP	Q/M		Q/T	



Normally Open Solenoid Valve



Normally Closed Solenoid Valve



OPTIONS

YVF * - LAN - **

- G** Normally Open
H Normally Closed

CARTRIDGE

RVGA Pg 1.19
For Viton Seals Change LAN to LAV.
Customer Specified Setting Stamped on Hex

SOLENOID COILS

- J** 12 volt DC, 0,6 metre leads
K 24 volt DC, 0,6 metre leads
N 115 volt, 50/60 Hz, conduit
O 230 volt, 50/60 Hz, conduit
S 12 volt DC, ISO/DIN

- T** 24 volt DC, ISO/DIN
V 230 volt, 50/60 Hz, ISO/DIN
W 120 volt, 50/60 Hz, ISO/DIN

PORTS
See Chart above



HYDROSTATIC TRANSMISSION ASSEMBLY INLINE BODY

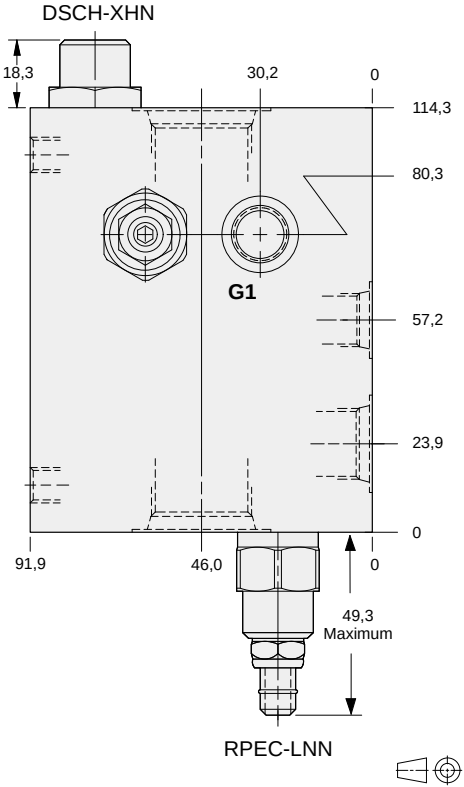
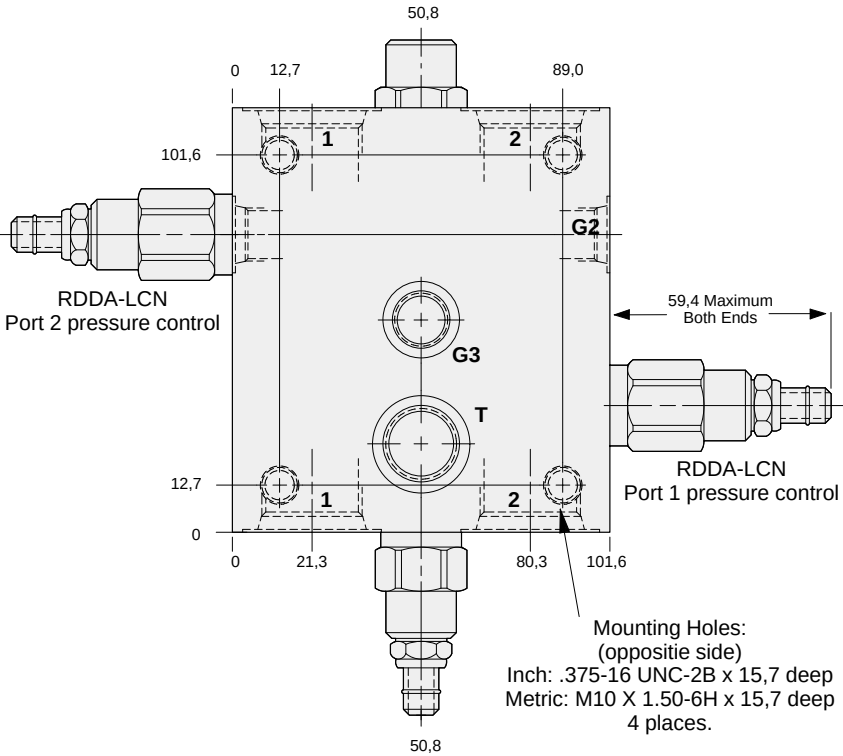
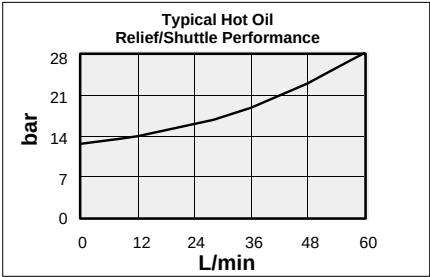
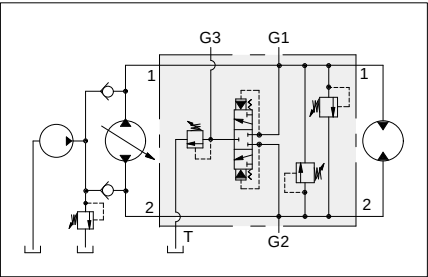


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-8	.25 NPTF	L		L/S	
Metric	.75 BSPP	.375 BSPP	.25 BSPP	W		W/S	



OPTIONS

XRDB - LCN - A*

CARTRIDGE

RDDA Pg 1.10
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart above

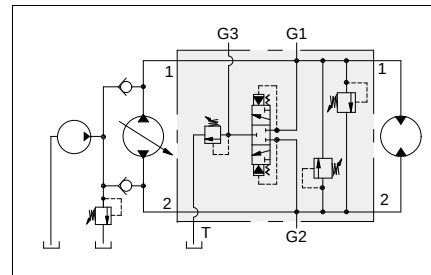


HYDROSTATIC TRANSMISSION ASSEMBLY .75" SAE FLANGE PORT BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

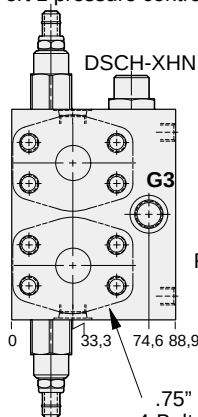
Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-8	SAE-6	O		O/S	
Metric	Code 61	.375 BSPP	.25 BSPP	O/M		O/T	



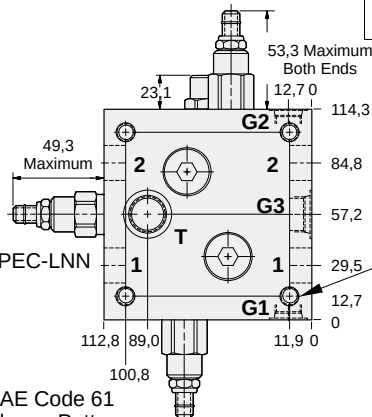
These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

RDDA-LCN
Port 1 pressure control



RDDA-LCN

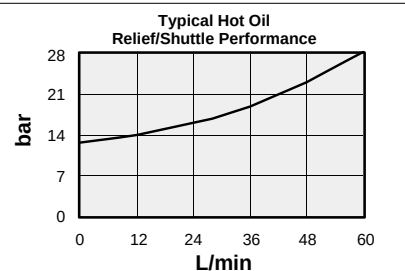
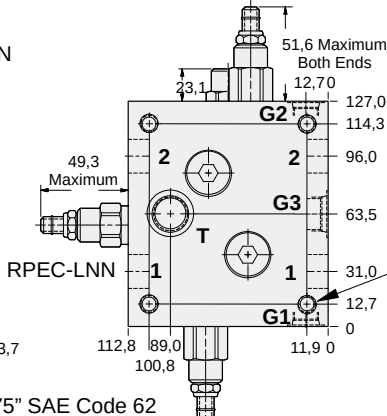
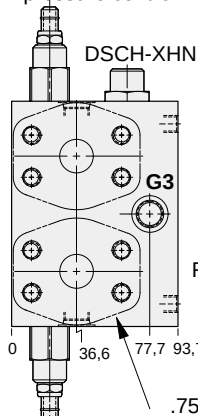


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
4 places.

RDDA-LCN
Port 2 pressure control

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-8	SAE-6	3		3/S	
Metric	Code 62	.375 BSPP	.25 BSPP	3/M		3/T	

RDDA-LCN
Port 1 pressure control



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
4 places.

RDDA-LCN
Port 2 pressure control

OPTIONS

XRDB - LCN - A*

CARTRIDGE

RDDA Pg 1.10
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



HYDROSTATIC TRANSMISSION ASSEMBLY INLINE BODY

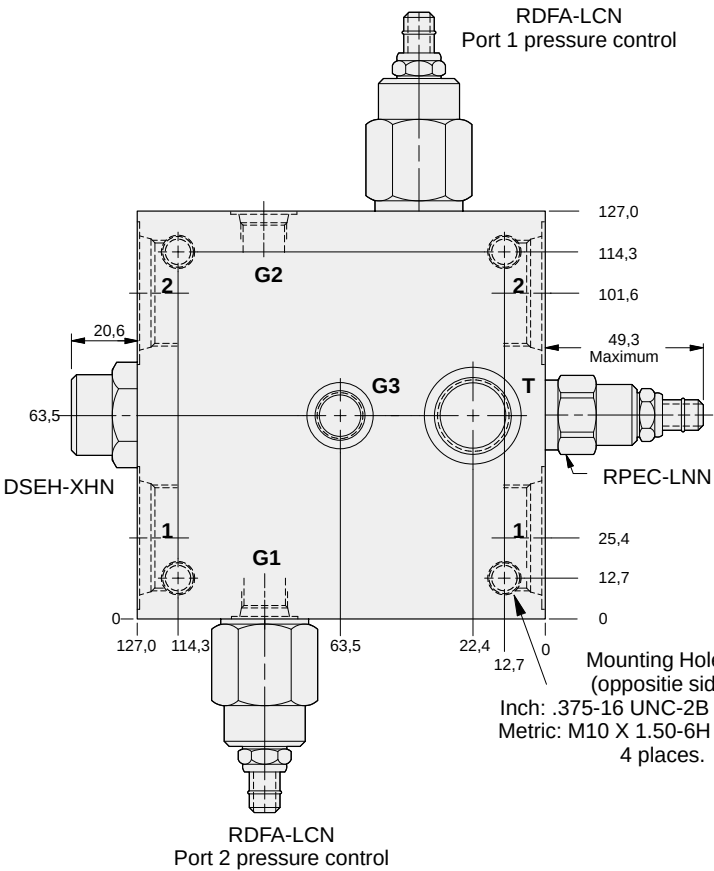
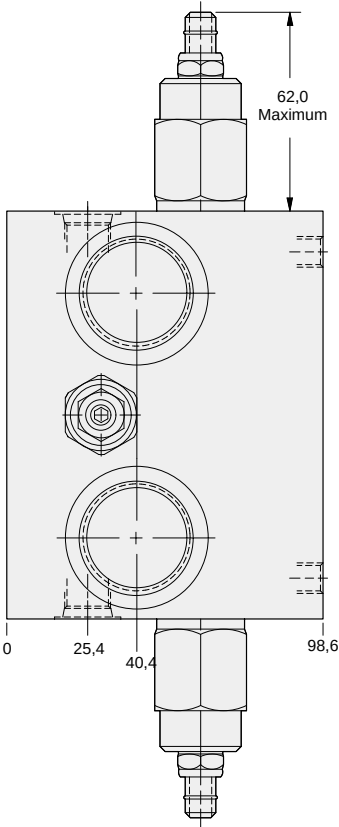
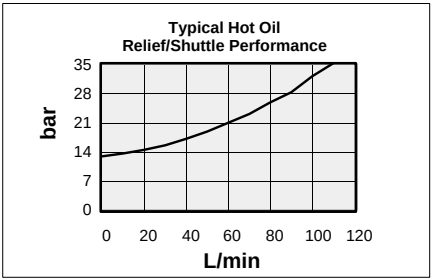
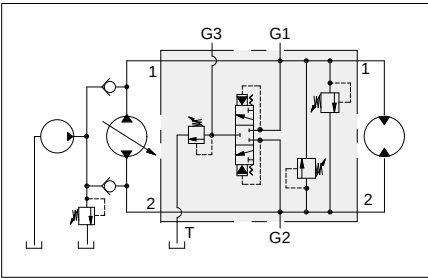


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-16	SAE-10	SAE-6	M		M/S	
Metric	1.00 BSPP	.50 BSPP	.25 BSPP	X		X/S	



OPTIONS

XRFB - LCN - A*

CARTRIDGE

RDFA Pg 1.10
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



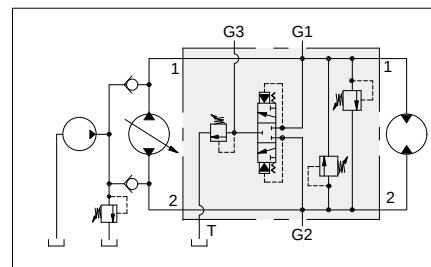
HYDROSTATIC TRANSMISSION ASSEMBLY

1.00" SAE FLANGE PORT BODY



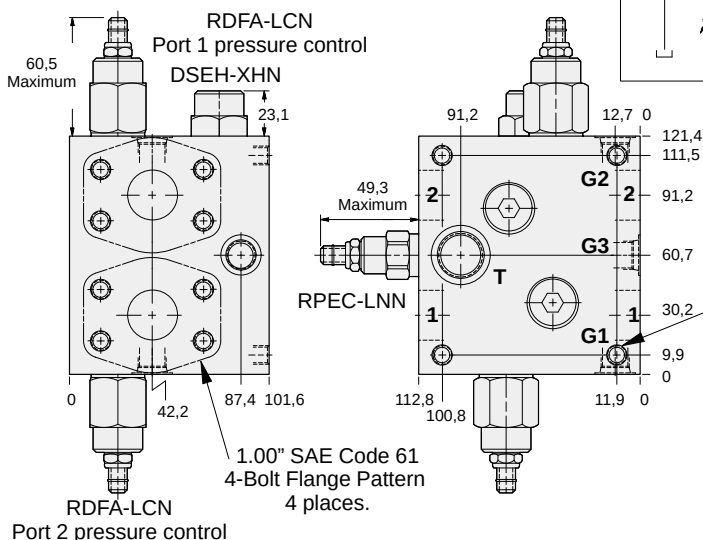
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-10	SAE-6	P		P/S	
Metric	Code 61	.50 BSPP	.25 BSPP	P/M		P/T	



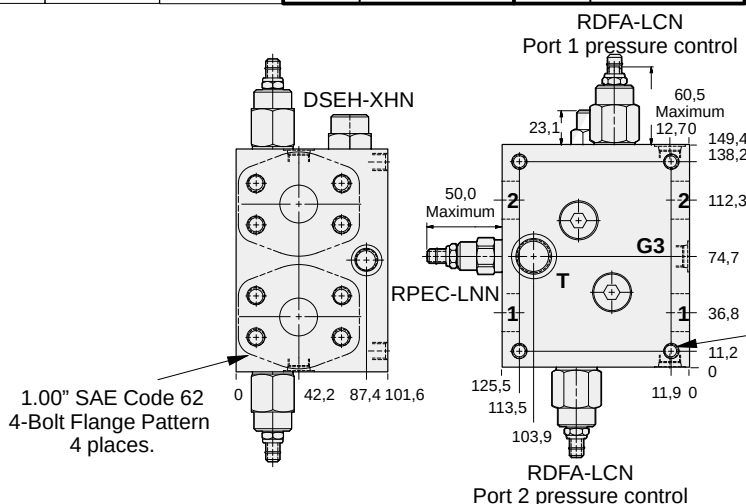
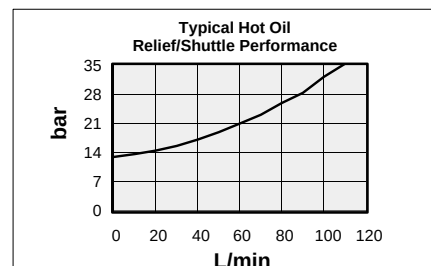
These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 x 1.50-6H x 19,0 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-10	SAE-6	4		4/S	
Metric	Code 62	.50 BSPP	.25 BSPP	4/M		4/T	



Mounting Holes:
(opposite side)
Inch: .438-14 UNC-2B x 26,9 deep
Metric: M12 x 1.75-6H x 26,9 deep
4 places.

OPTIONS		XRFB - LCN - A*	
CARTRIDGE		PORTS	
RDFA Pg 1.10 For Viton Seals Change LCN to LCV.		Customer Specified Setting Stamped on Hex See Chart above	



HYDROSTATIC TRANSMISSION ASSEMBLY
1.25" SAE CODE 61 FLANGE PORT BODY

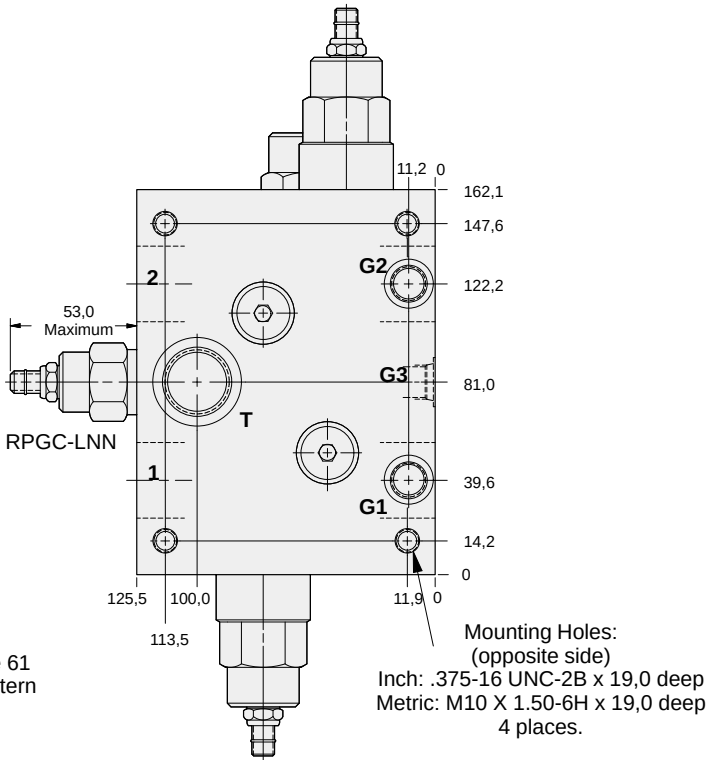
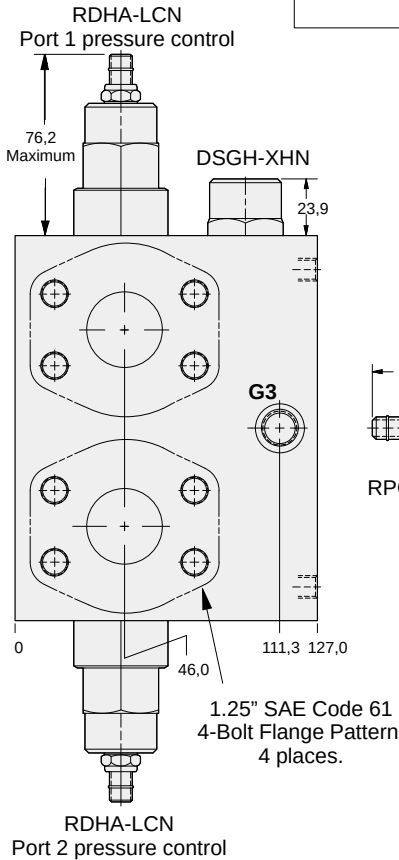
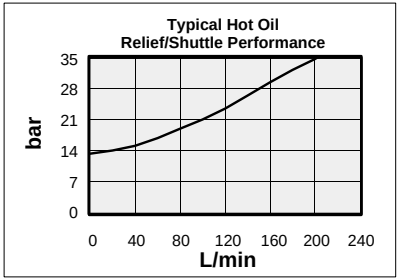
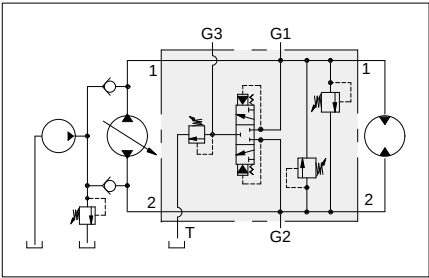


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-6	Q		Q/S	
Metric	.75 BSPP	.25 BSPP	Q/M		Q/T	



OPTIONS

XRHB - LCN - A*

CARTRIDGE

RDHA Pg 1.11
For Viton Seals Change LCN to LCV.

PORTS

Customer Specified Setting
Stamped on Hex

See Chart
above



HYDROSTATIC TRANSMISSION ASSEMBLY 1.25" SAE CODE 62 FLANGE PORT BODY

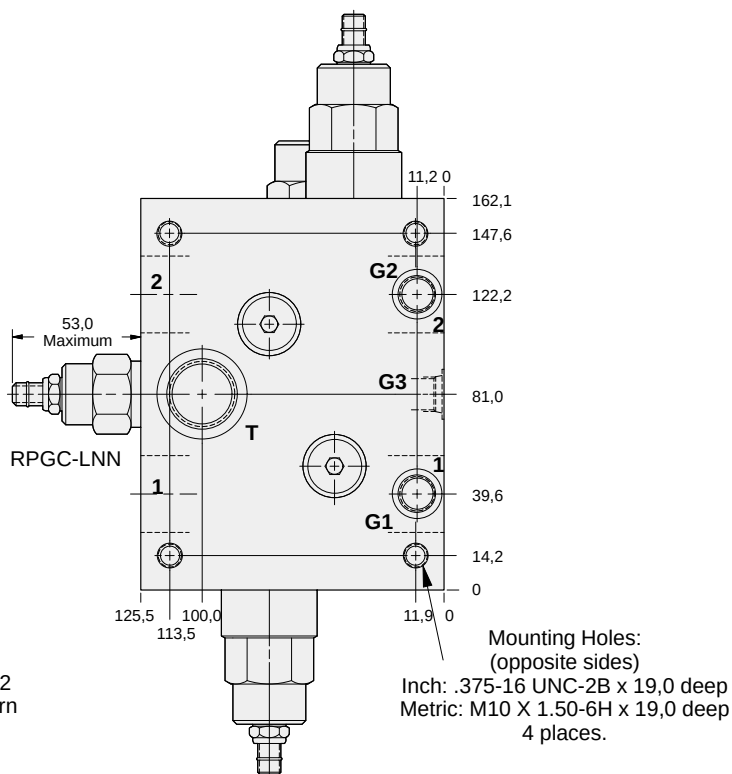
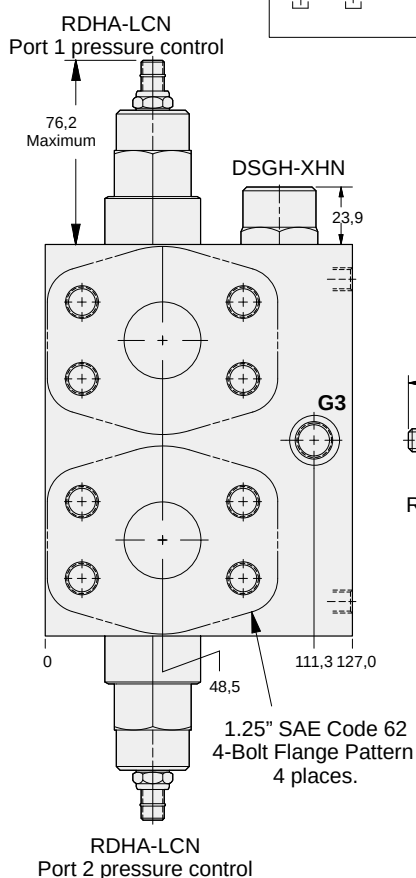
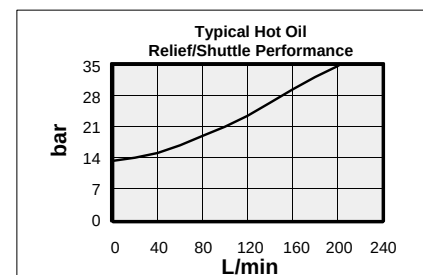
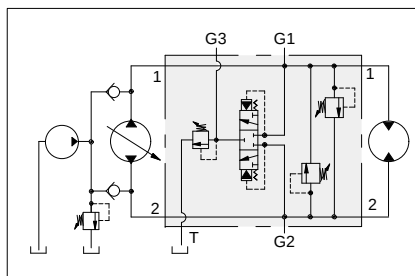


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-6	5		5/S	
Metric	.75 BSPP	.25 BSPP	5/M		5/T	



13

OPTIONS

XRHB - LCN - A*

CARTRIDGE

RDHA Pg 1.11
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above

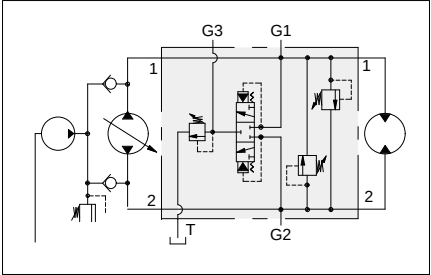


HYDROSTATIC TRANSMISSION ASSEMBLY
1.50" SAE FLANGE PORT BODY



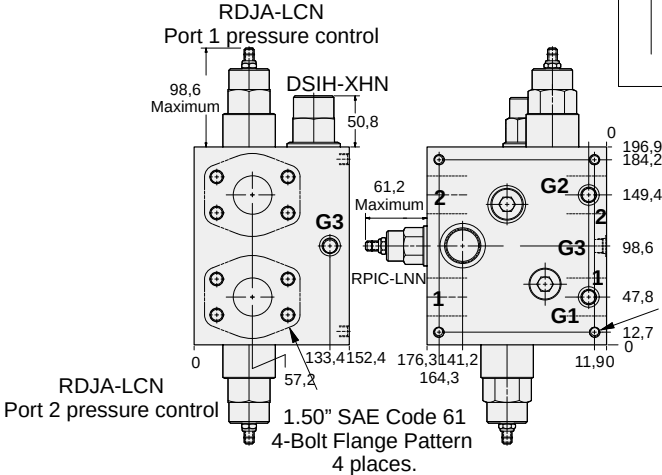
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	R		R/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	R/M		R/T	



These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

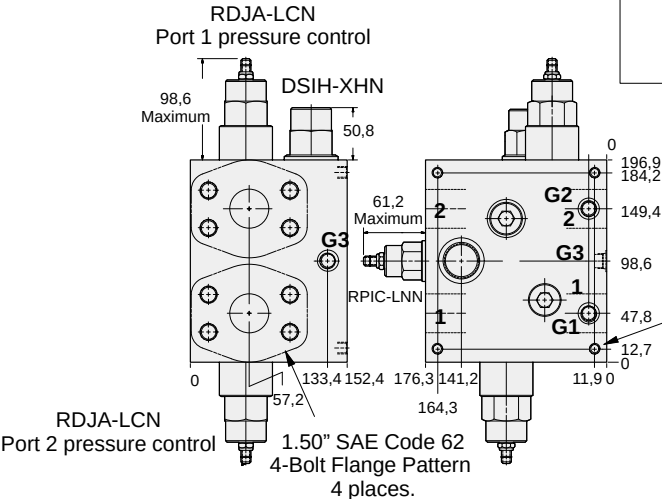
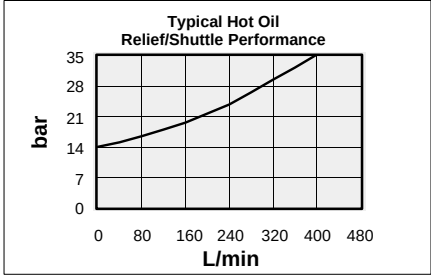
NOTE: A mechanical brake is recommended to positively lock any stopped live load.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22,4 deep
Metric: M10 X 1.50-6H x 22,4 deep
4 places.



Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	6		6/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	6/M		6/T	



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22,4 deep
Metric: M10 X 1.50-6H x 22,4 deep
4 places.



OPTIONS

XRJB - LCN - A*

CARTRIDGE

RDJA Pg 1.11
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



HYDROSTATIC TRANSMISSION ASSEMBLY 2.00" SAE FLANGE PORT BODY

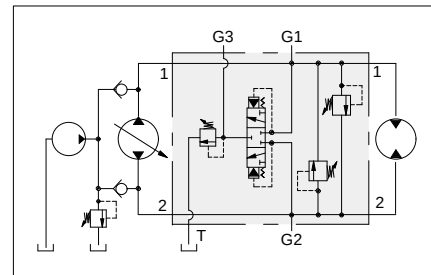
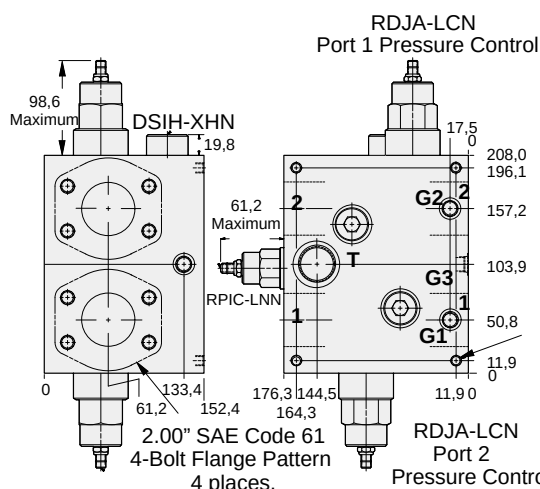


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	S		S/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	S/M		S/T	

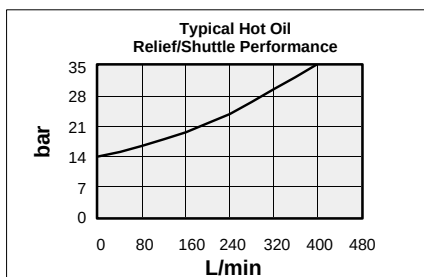
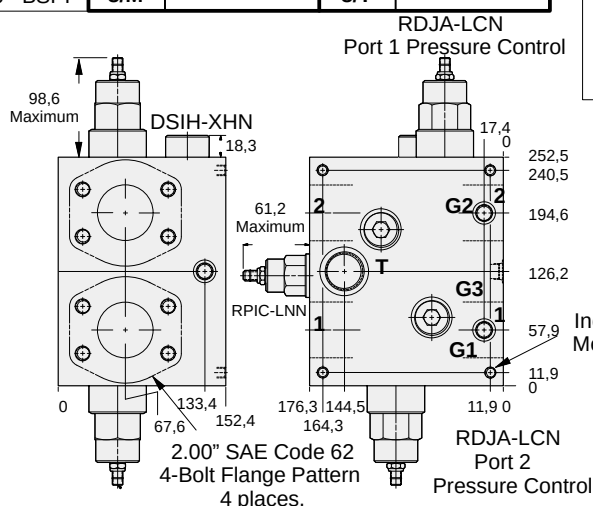
These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22.4 deep
Metric: M10 X 1.50-6H x 22.4 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	8		8/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	8/M		8/T	



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22.4 deep
Metric: M10 X 1.50-6H x 22.4 deep
4 places.

OPTIONS

XRJB - LCN - A*

CARTRIDGE

RDJA Pg 1.11
For Viton Seals Change LCN to LCV.

PORTS

Customer Specified Setting
Stamped on Hex

See Chart
above



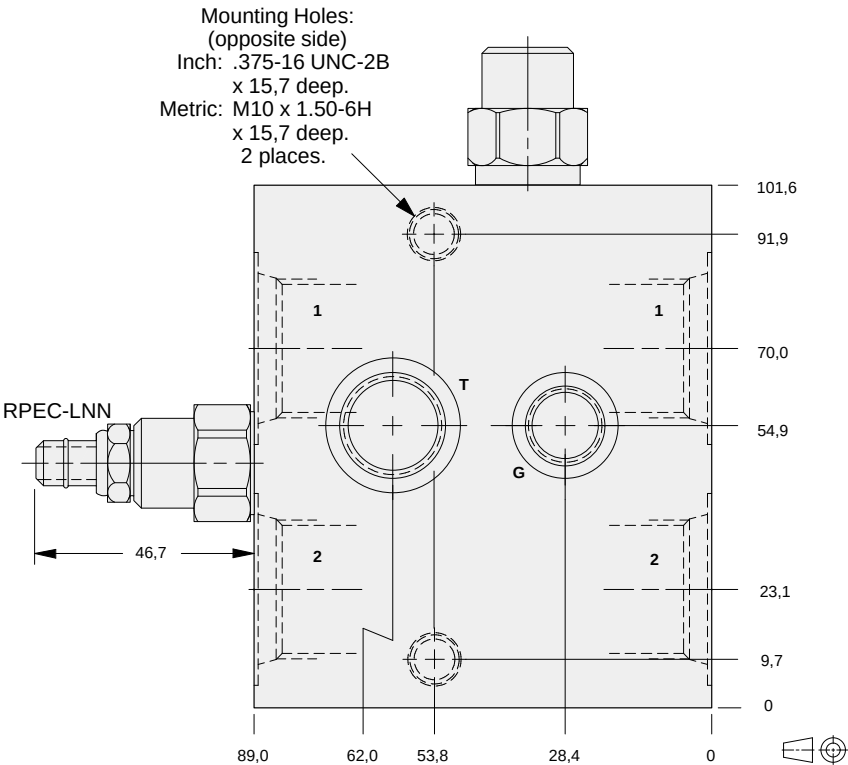
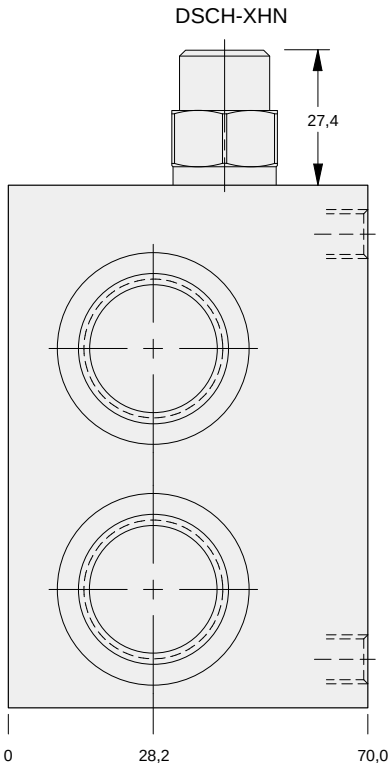
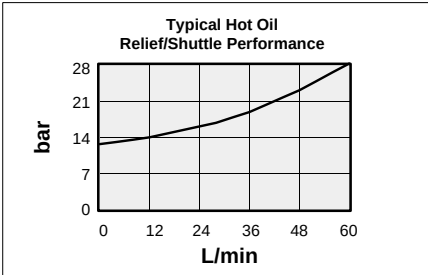
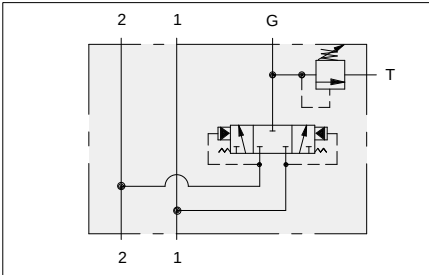
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-10	SAE-8	SAE-6	K		K/S	
Inch	SAE-12	SAE-8	SAE-6	L		L/S	
Metric	.50 BSPP	.375 BSPP	.25 BSPP	V		V/S	
Metric	.75 BSPP	.375 BSPP	.25 BSPP	W		W/S	



OPTIONS

XRDC - LNN - A*

CARTRIDGE

RPEC Pg 1.11
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above

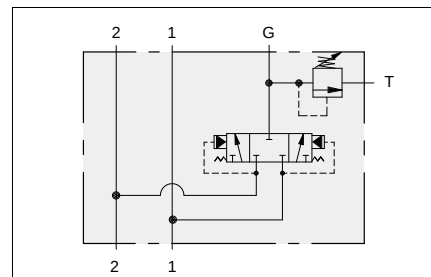


HOT OIL SHUTTLE AND RELIEF ASSEMBLY .75" SAE FLANGE PORT BODY



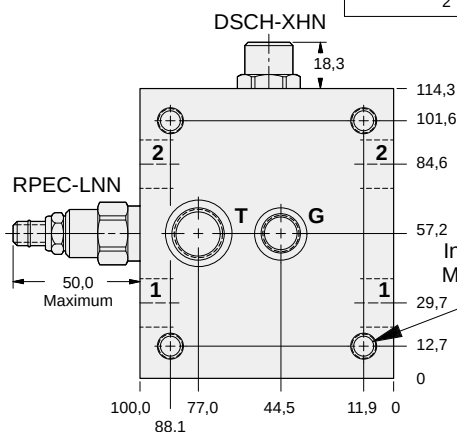
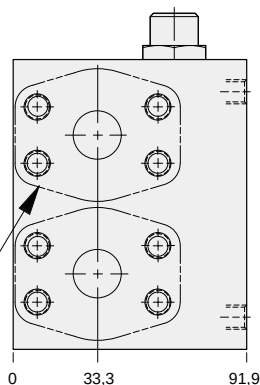
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-8	SAE-6	O		O/S	
Metric	Code 61	.375 BSPP	.25 BSPP	O/M		O/T	



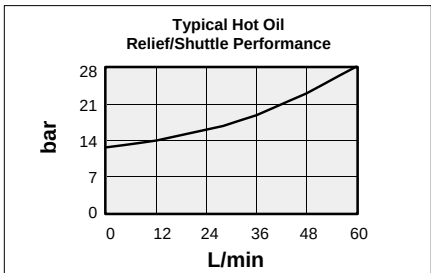
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

.75" SAE Code 61
4-Bolt Flange Pattern
4 places.

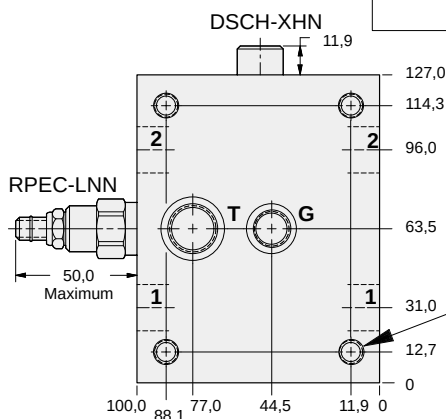
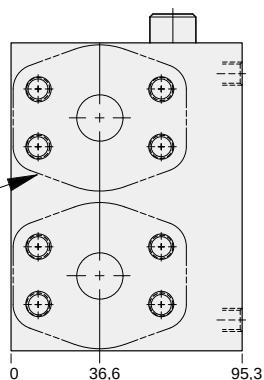


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-8	SAE-6	3		3/S	
Metric	Code 62	.375 BSPP	.25 BSPP	3/M		3/T	



.75" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

13

OPTIONS		XRDC - LNN - A*	
	CARTRIDGE	Customer Specified Setting Stamped on Hex	PORTS See Chart above
	RPEC Pg 1.06 For Viton Seals Change LNN to LNV.		



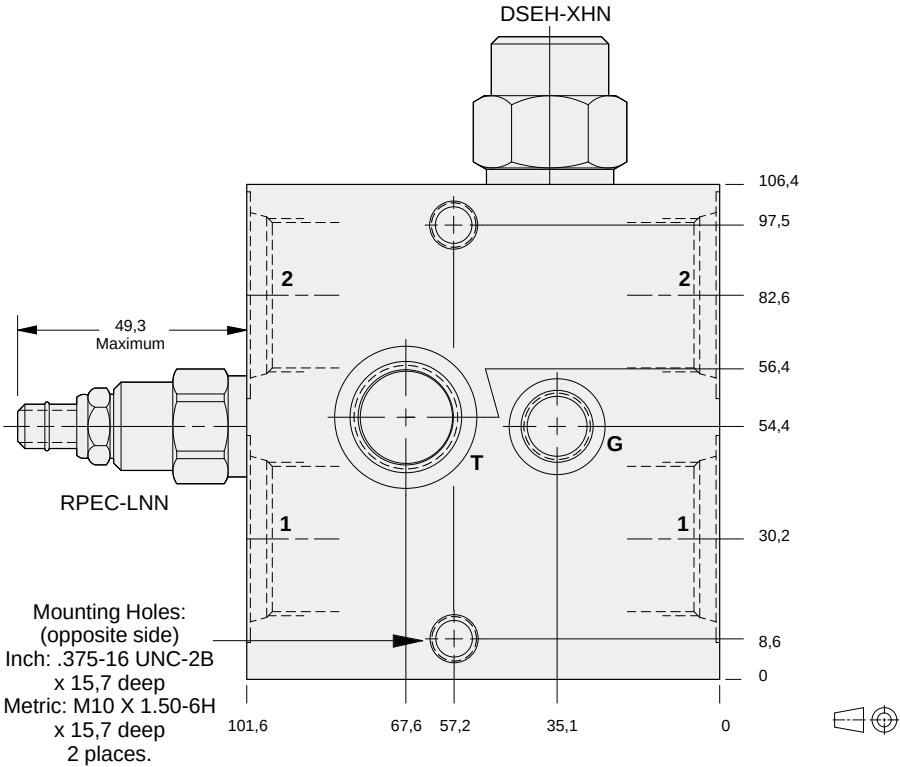
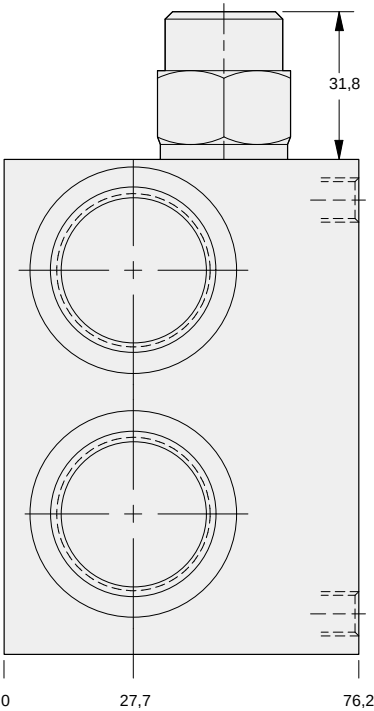
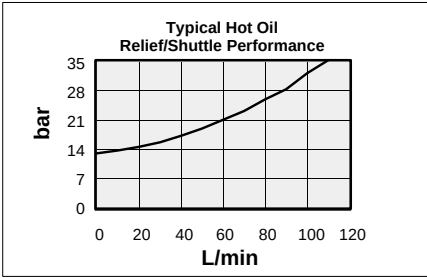
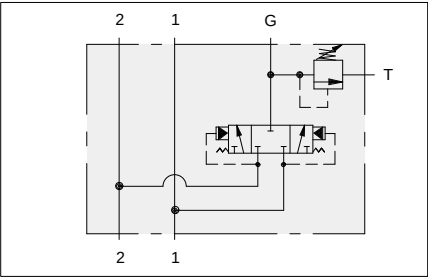
HOT OIL SHUTTLE AND RELIEF ASSEMBLY
INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-10	SAE-6	L		L/S	
Inch	SAE-16	SAE-10	SAE-6	M		M/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	
Metric	1.00 BSPP	.50 BSPP	.25 BSPP	X		X/S	



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.

OPTIONS

XRFC – LNN

A*

CARTRIDGE

RPEC Pg 1.06
For Viton Seals Change LNN to LNV.

PORTS

Customer Specified Setting
Stamped on Hex

See Chart
above

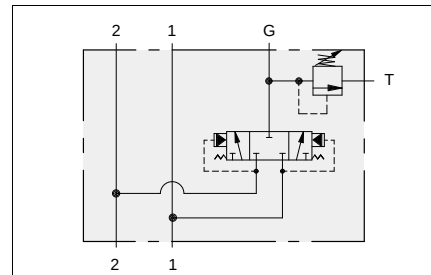


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 1.00" SAE FLANGE PORT BODY



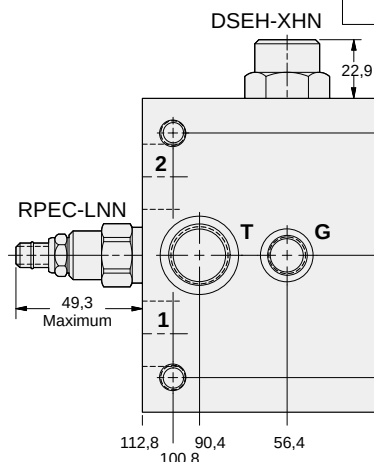
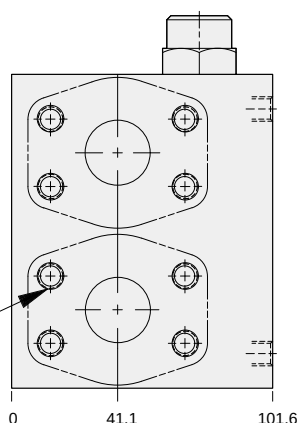
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-10	SAE-6	P		P/S	
Metric	Code 61	.50 BSPP	.25 BSPP	P/M		P/T	



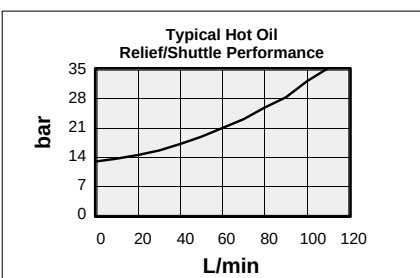
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

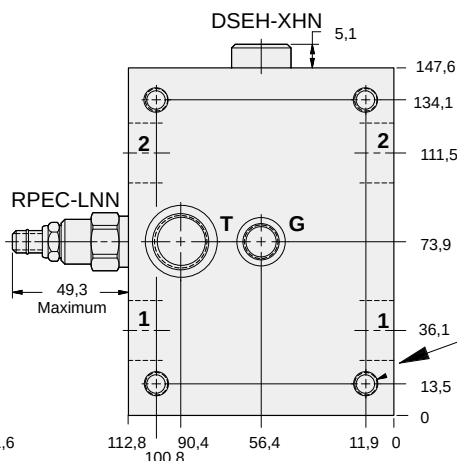
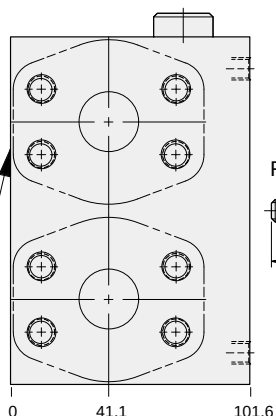


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-10	SAE-6	4		4/S	
Metric	Code 62	.50 BSPP	.25 BSPP	4/M		4/T	



1.00" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.

OPTIONS

XRFC - LNN - A*

CARTRIDGE

RPEC Pg 1.06
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



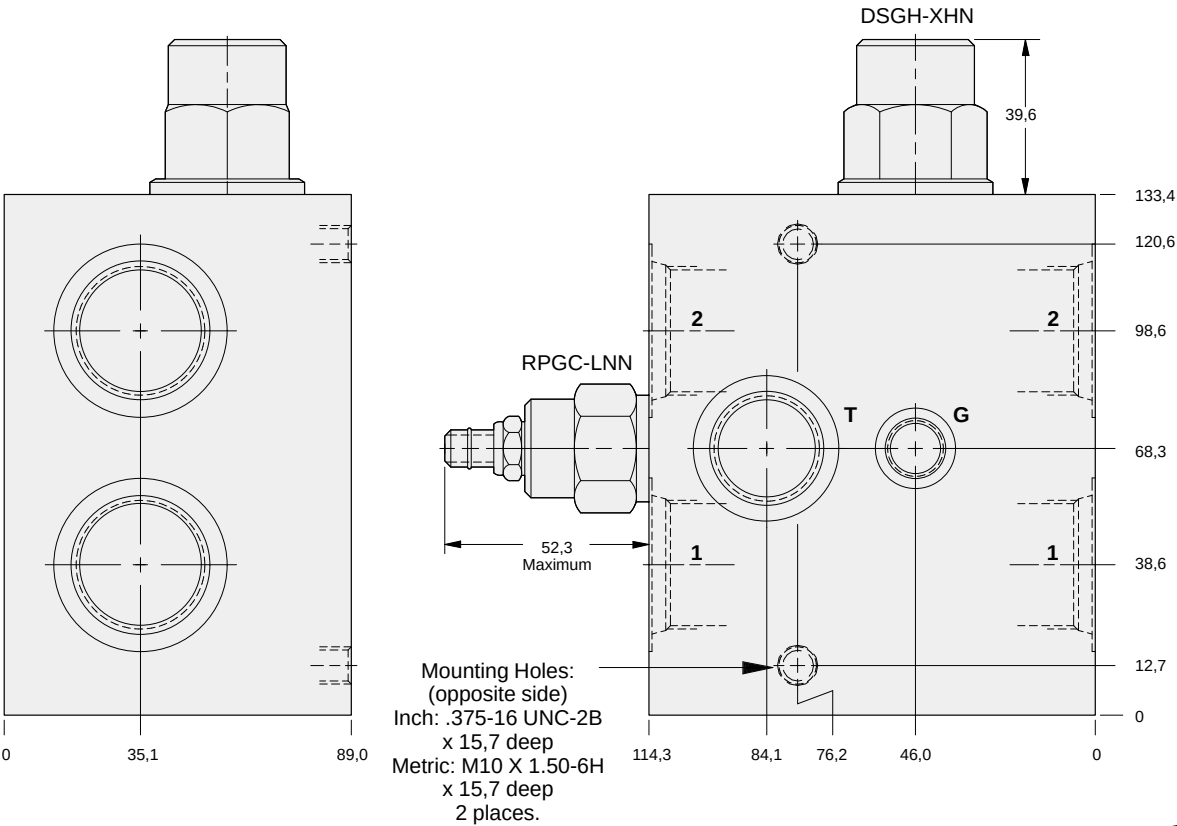
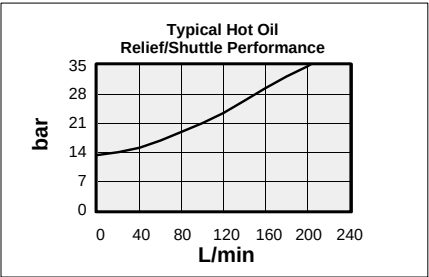
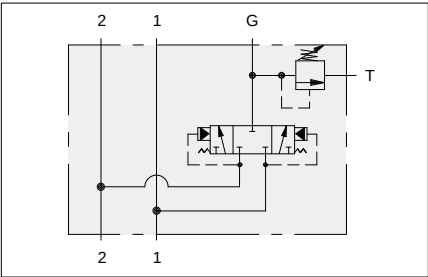
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-16	SAE-12	SAE-6	M		M/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	



OPTIONS

XRHC - LNN - A*

CARTRIDGE

RPGC Pg 1.06
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



HOT OIL SHUTTLE AND RELIEF ASSEMBLY 1.25" SAE FLANGE PORT BODY

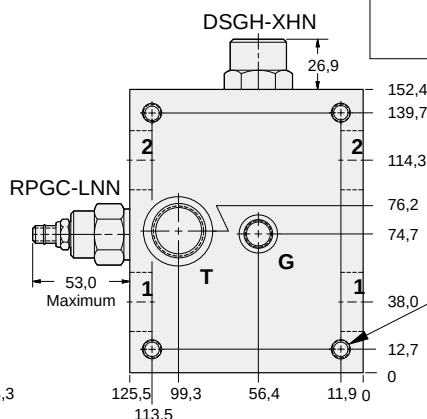
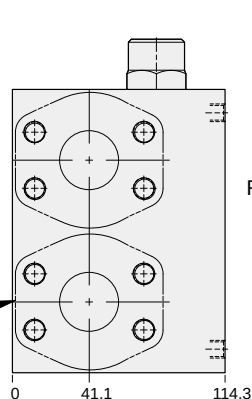


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-12	SAE-6	Q		Q/S	
Metric	Code 61	.75 BSPP	.25 BSPP	Q/M		Q/T	

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places.

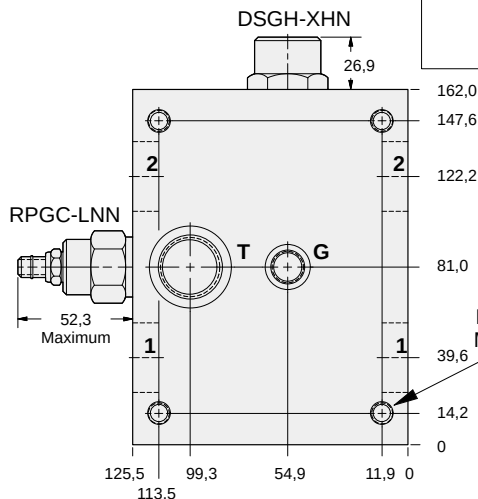
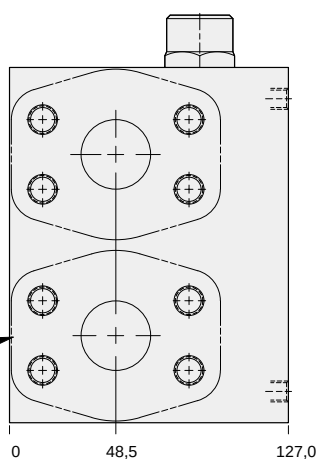


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.

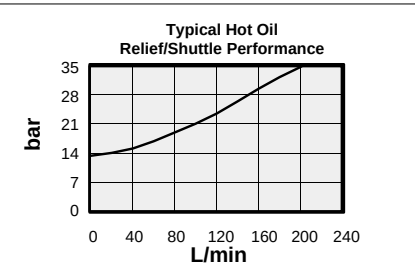


Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-12	SAE-6	5		5/S	
Metric	Code 62	.75 BSPP	.25 BSPP	5/M		5/T	

1.25" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.



OPTIONS

XRHC - LNN - A*

CARTRIDGE

RPGC Pg 1.06
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



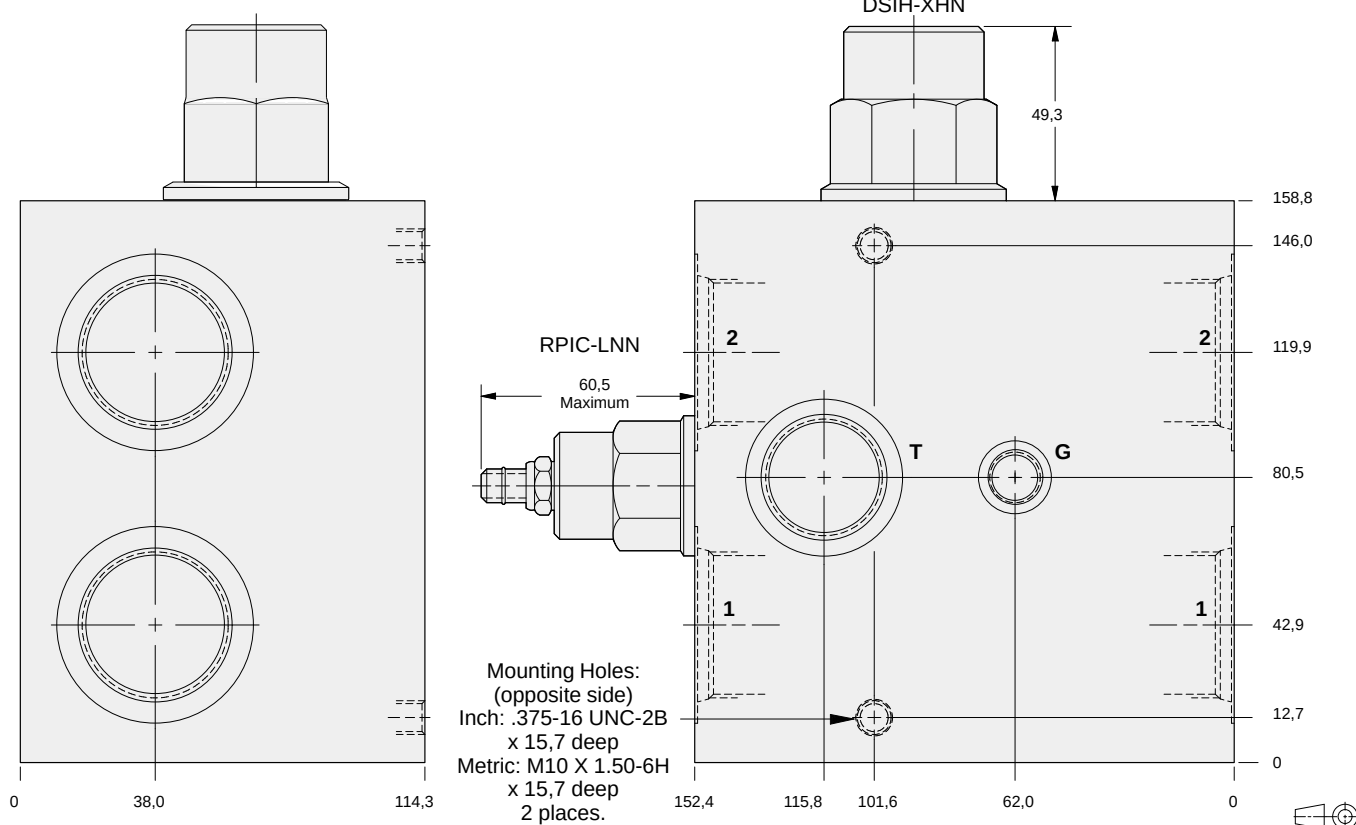
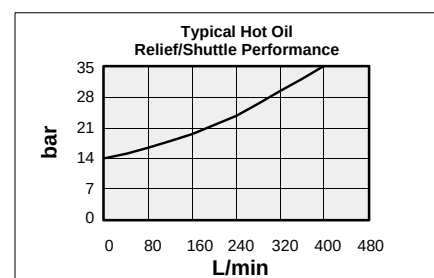
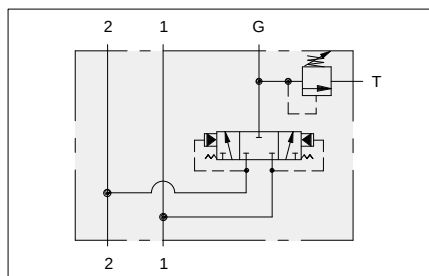
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-20	SAE-16	SAE-6	M		M/S	
Metric	1.25 BSPP	1.00 BSPP	.25 BSPP	X		X/S	



13

OPTIONS

XRJC - LNN - A*

CARTRIDGE

RPIC Pg 1.07
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above

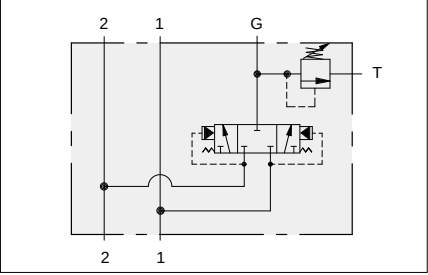


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 1.50" SAE FLANGE PORT BODY



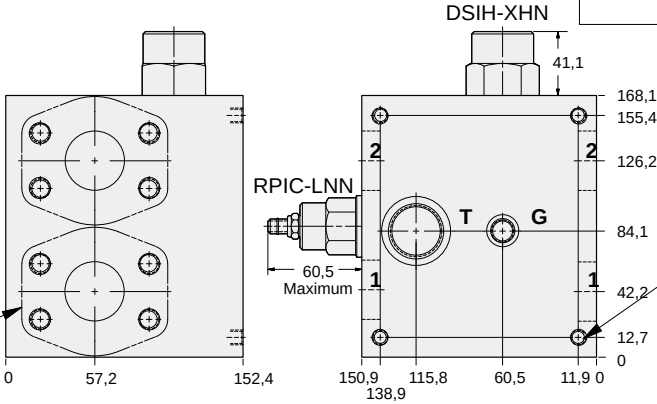
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	R		R/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	R/M		R/T	



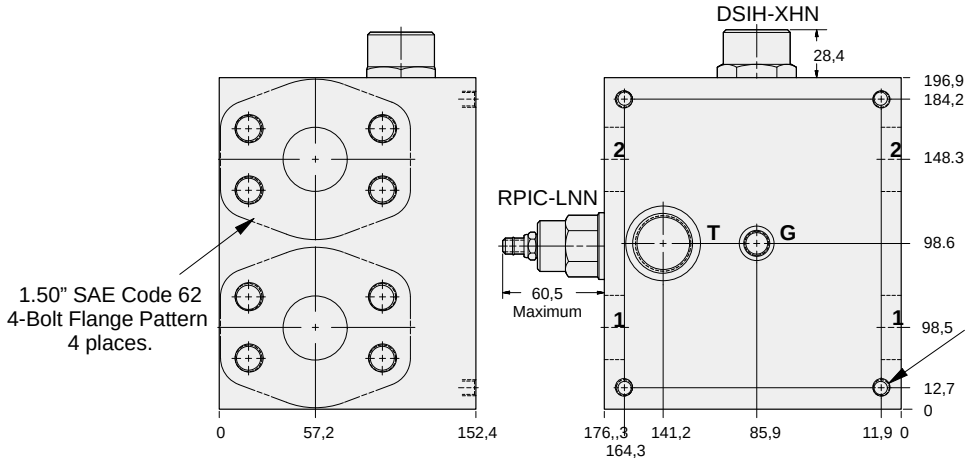
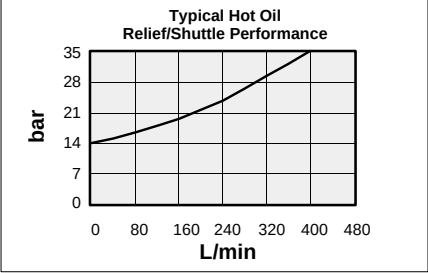
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

1.50" SAE Code 61
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	6		6/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	6/M		6/T	



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

OPTIONS

XRJC - LNN - A*

CARTRIDGE

RPIC Pg 1.07
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above

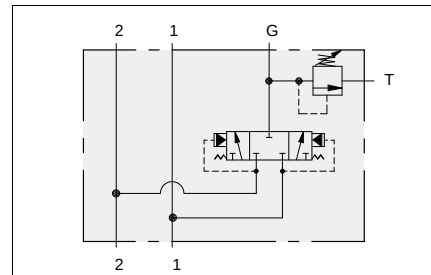


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 2.00" SAE FLANGE PORT BODY



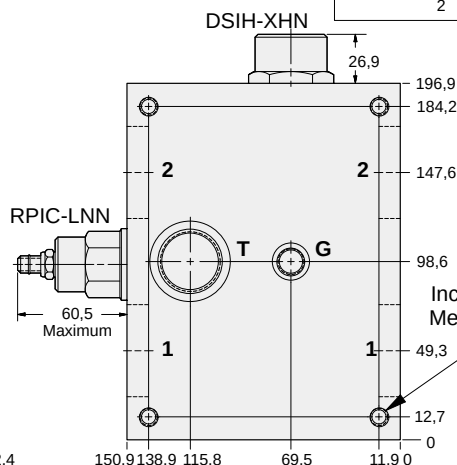
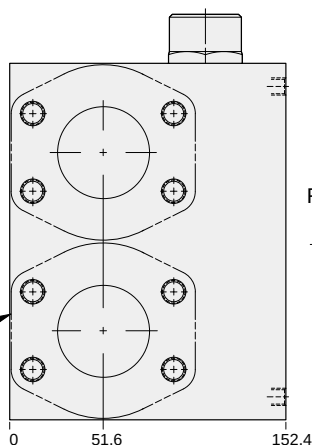
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	S		S/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	S/M		S/T	



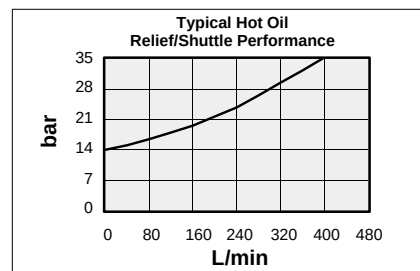
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

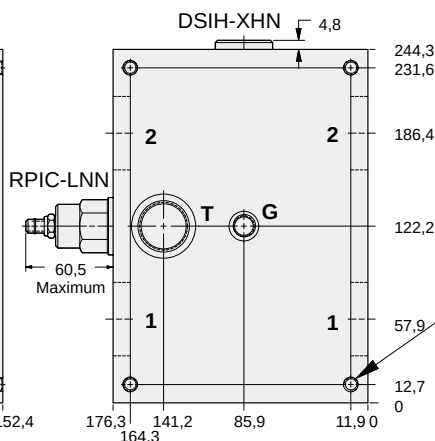
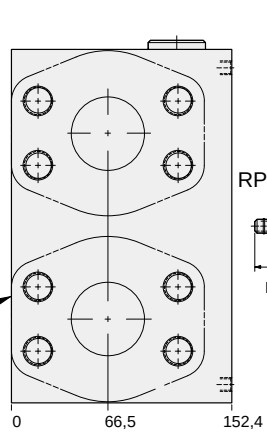


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	8		8/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	8/M		8/T	



2.00" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

OPTIONS

XRJC - LNN - A*

CARTRIDGE

RPIC Pg 1.07
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

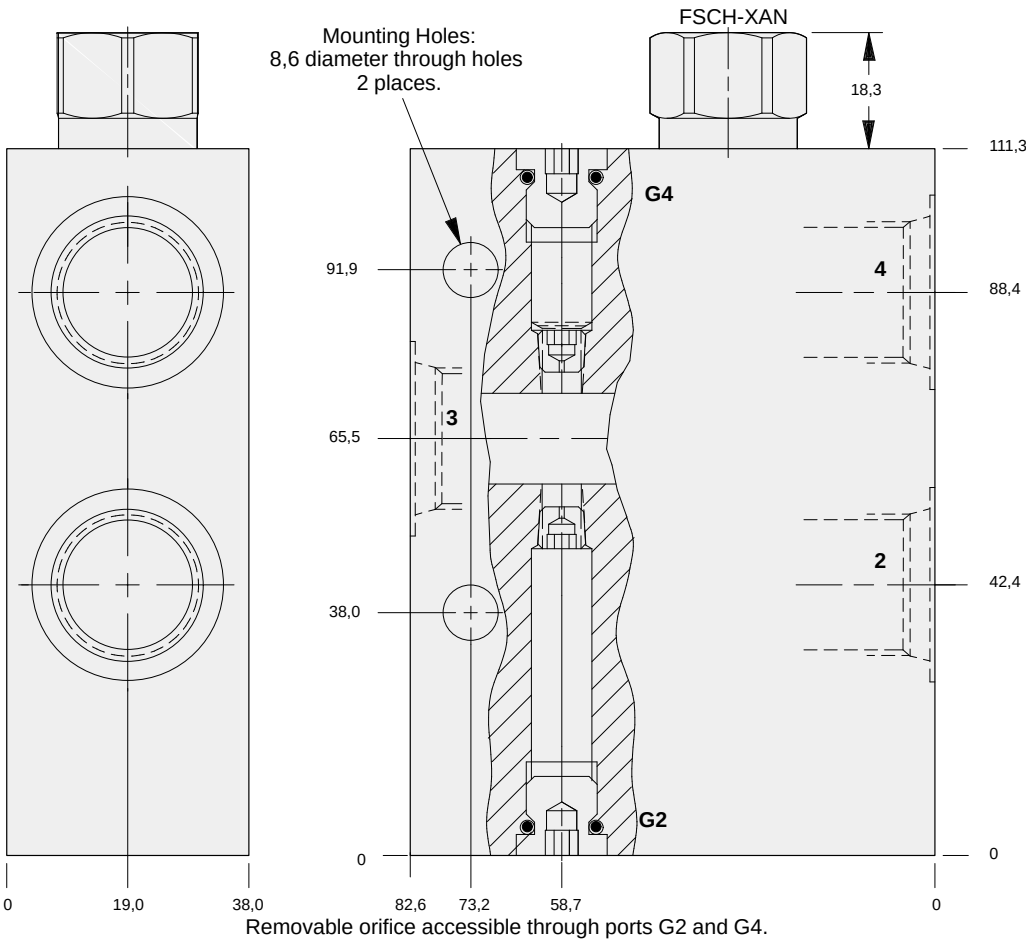
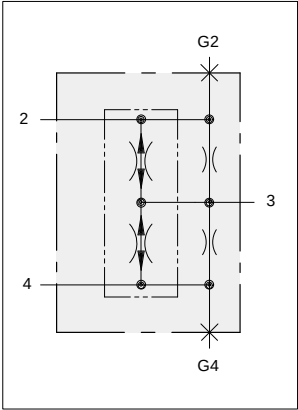
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
L	2,6	7,2
P	6,4	17,8
R	10,5	29,1

Other slip ranges are available, and are detailed on SUN drawing #280-038.
Slip at 25 bar is additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.25 NPTF	A		A/S	
.375 NPTF	B		B/S	
.50 NPTF	C		C/S	
SAE-6	I		I/S	
SAE-8	J		J/S	
SAE-10	K		K/S	
.25 BSPP	T		T/S	
.375 BSPP	U		U/S	
.50 BSPP	V		V/S	



OPTIONS

YGCB - XAN - * *

CARTRIDGE

FSCH Pg 7.14
For Viton Seals Change
XAN to XAV.

Customer Specified Setting
Stamped on Hex

ORIFICE

See Chart
above

PORTS

See Chart
above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

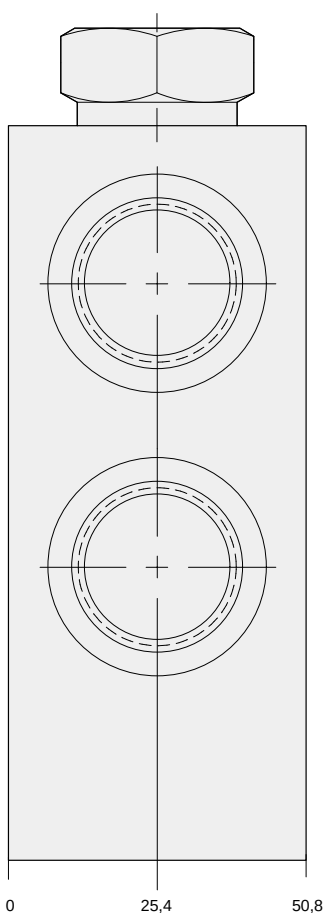
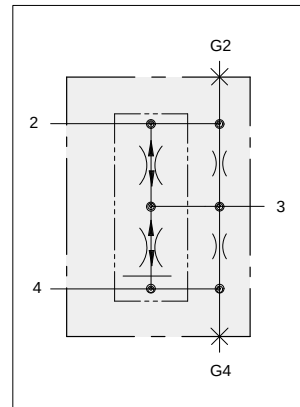
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
N	4,5	12,0
S	13	35,0
U	23,0	61,0

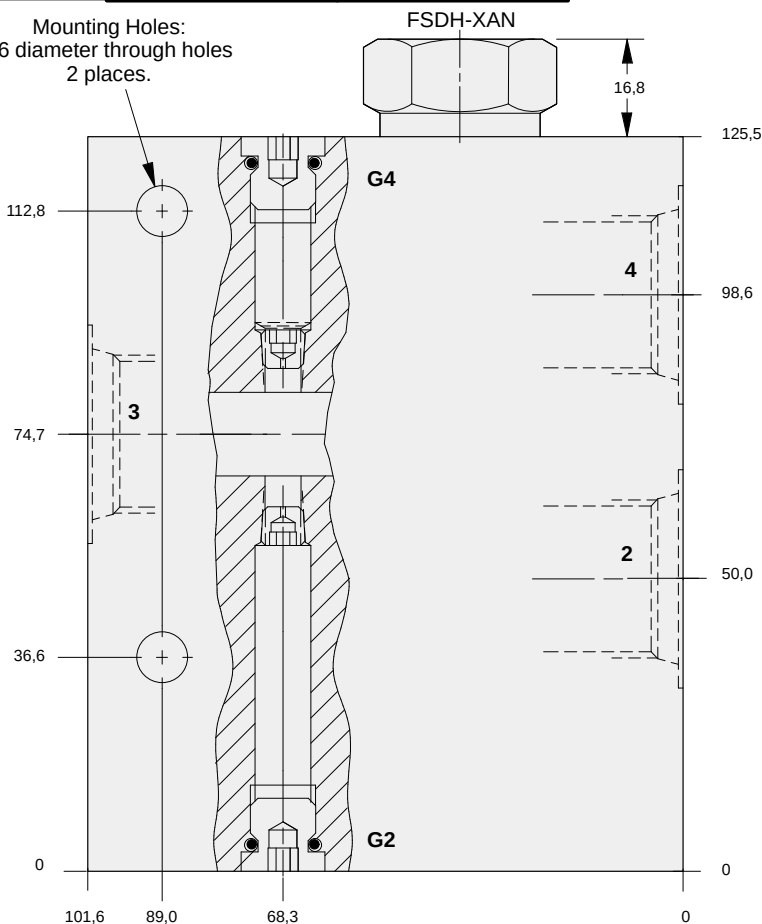
Other slip ranges are available, and are detailed on SUN drawing #280-038.
Slip at 25 bar is additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.375 NPTF	B		B/S	
.50 NPTF	C		C/S	
.75 NPTF	D		D/S	
SAE-8	J		J/S	
SAE-10	K		K/S	
SAE-12	L		L/S	
.375 BSPP	U		U/S	
.50 BSPP	V		V/S	
.75 BSPP	W		W/S	



Mounting Holes:
8,6 diameter through holes
2 places.



Removable orifice accessible through ports G2 and G4.

OPTIONS

YGDB - XAN - **

CARTRIDGE

FSDH Pg 7.14
For Viton Seals Change
XAN to XAV.

Customer Specified Setting
Stamped on Hex

ORIFICE

See Chart
above

PORTS

See Chart
above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

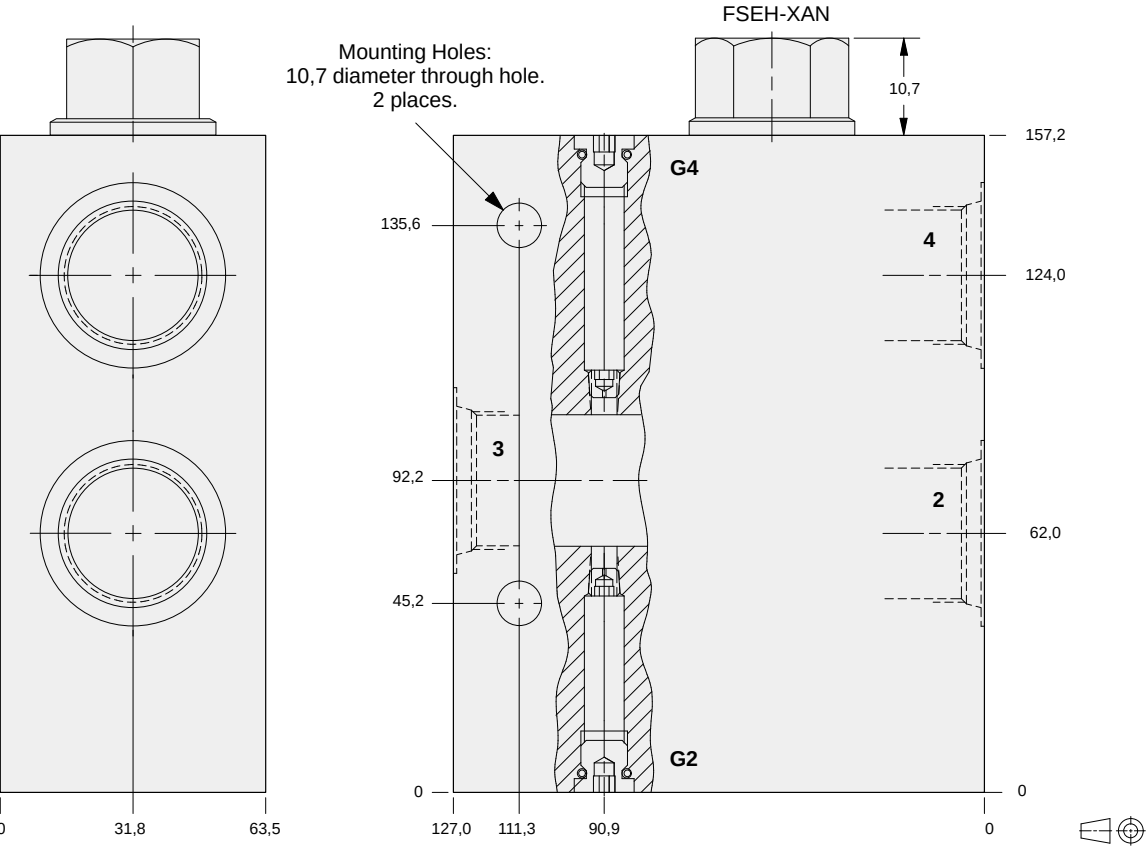
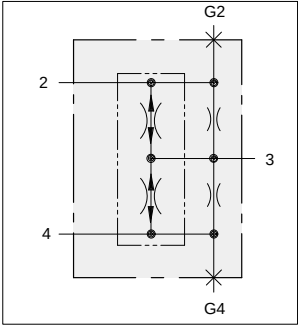
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
Q	8,7	24,0
U	23,0	61,0
W	35,0	96,0

Other slip ranges are available, and are detailed on SUN drawing #280-038.
Slip at 25 bar additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.75 NPTF	D		D/S	
1.00 NPTF	E		E/S	
SAE-12	L		L/S	
SAE-16	M		M/S	
.75 BSPP	W		W/S	
1.00 BSPP	X		X/S	



Removable orifice accessible through ports G2 and G4.

OPTIONS		YGEB - XAN - * *		
		CARTRIDGE	ORIFICE	PORTS
		FSEH Pg 7.15 For Viton Seals Change XAN to XAV.	See Chart above	See Chart above
		Customer Specified Setting Stamped on Hex		



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

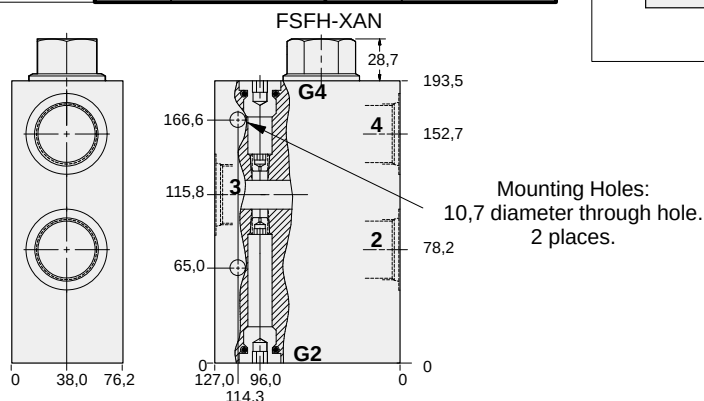
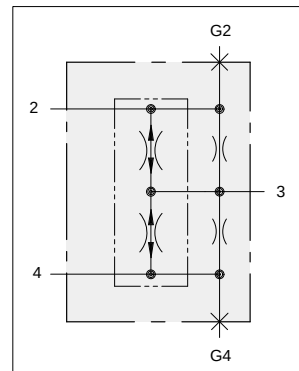
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
T	17,0	45,0
X	50,0	140,0
Y	90,0	245,0

Other slip ranges are available, and are detailed on SUN drawing #280-040.
Slip at 25 bar is additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
1.00 NPTF	E		E/S	
1.25 NPTF	F		F/S	
SAE-16	M		M/S	
SAE-20	N		N/S	
1.00 BSPP	X		X/S	
1.25 BSPP	Y		Y/S	



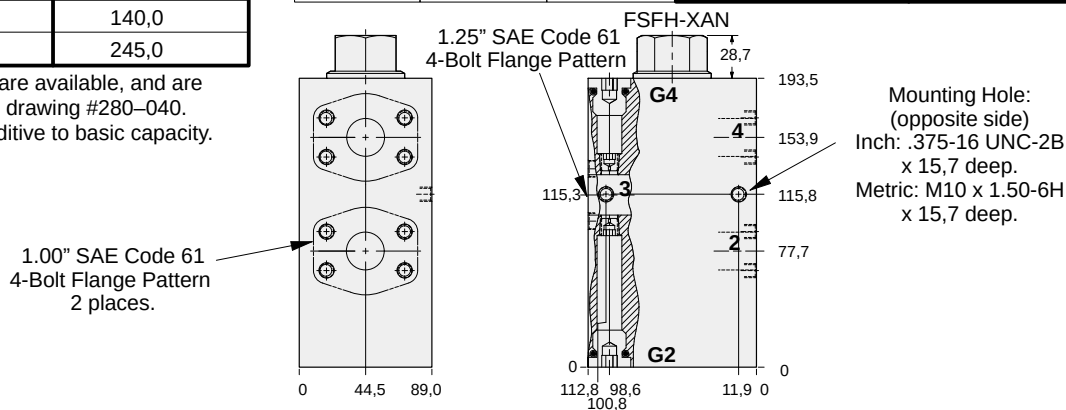
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
T	17,0	45,0
X	50,0	140,0
Y	90,0	245,0

Other slip ranges are available, and are detailed on SUN drawing #280-040.
Slip at 25 bar is additive to basic capacity.

Removable orifice accessible through ports G2 and G4.

Mounting Holes:	Port 3 Code 61	Port 2 & 4 Code 61	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	1.25"	1.00"	Q		Q/S	
Metric	1.25"	1.00"	Q/M		Q/T	



Removable orifice accessible through ports G2 and G4.

OPTIONS

YGFB - XAN - * *

CARTRIDGE

FSFH Pg.7.15
For Viton Seals Change
XAN to XAV.

Customer Specified Setting
Stamped on Hex

ORIFICE

See Chart
above

PORTS

See Chart
above



Applications

Regenerative circuits allow a cylinder to be advanced more rapidly than it could be with pump flow alone. To achieve this, oil from the rod end of a cylinder is added to the pump flow to the blind end, increasing the rate of advance.

NOTE: Regeneration circuits apply only to single rod cylinders in the extended direction.

SUN Hydraulics offers two types of regenerative valve assemblies, pressure sensitive and continuous regeneration.

Determination of the type of regenerative circuit to be used is dependent upon the system requirements. In making this determination, several areas need careful consideration.

Pressure sensitive regenerative valves will provide regenerative flow to the blind end of the cylinder until the load induced pressure reaches the setting of the counterbalance valve, at which time rod end oil is automatically diverted to tank. The circuit then becomes non-regenerative and full system pressure is applied to the full blind area, allowing it to develop maximum force.

Continuous (or full time) regenerative valves will provide regenerative flow to the blind end of the cylinder during the complete extension cycle.

Hydraulic cylinders are manufactured with an almost unlimited combination of cylinder-to-rod ratios. These ratios can have a dramatic effect on the speed of extension and retraction of the cylinders.

A 2:1 cylinder (i.e. The blind end piston area is twice the rod end area.) will extend and retract at the same speed if regeneration is used. Without regeneration, the extend speed would be 50% of the retract speed.

Cylinders with large rod diameters typically offer small amounts of oil for use in cylinder extension in regenerative circuits. Rod extension speed therefore may not be increased substantially. In contrast, when retracting a large rod diameter cylinder in a regenerative circuit, the speed may be so great, due the small volume of oil required, that the system may become unstable and generate shock. Conversely, cylinders with small rod diameters may produce shock on rod extension, and retract slowly.

When applying pressure sensitive regenerative valve assemblies, several factors must be considered:

- The pressure required to move a cylinder.
- Rod-to-diameter ratio.
- Pressure adjustment methods required to control the setting of the SUN counterbalance valve.

Losses due to high flows and seal friction may prevent a circuit from staying in regeneration. *Be conservative in system design.*

NOTE: In applications where the load tends to extend the cylinder, a vented pilot to open check valve or a vented counterbalance valve may be installed in the cylinder rod port to positively lock the cylinder.

Formulae to calculate flow in regenerative circuits include:

$$\text{Regenerative Flow (flow out the rod end)} = \frac{Db^2 - Dr^2}{Dr^2} \times \text{Pump Flow}$$

$$\text{Combined Flow (pump flow plus regenerative flow)} = \frac{Db^2}{Dr^2} \times \text{Pump Flow}$$

$$\text{Retraction Flow (flow out of the blind end during retraction)} = \frac{Db^2}{Db^2 - Dr^2} \times \text{Pump Flow}$$

Db = Bore Diameter

Dr = Rod Diameter

Design Concepts and Features

SUN's pressure sensitive regenerative valve assembly incorporates a pressure adjustable counterbalance valve that provides a smooth transition when the work is engaged and pressure in the blind end rises to approximately 25% of the set point of the counterbalance valve, at which time the regenerative flow decreases smoothly until rod end flow is fully diverted to tank. Full pump pressure is then applied to the blind end area developing maximum force.

SUN's full time regenerative valve assembly utilizes a standard check valve in place of the counterbalance valve. This allows flow from the rod end to be supplied to the blind end continuously during the complete extension cycle.

SUN's regenerative valve assemblies are available in various flow rates and packaged as inline, ISO sandwich assemblies, and subplate versions.

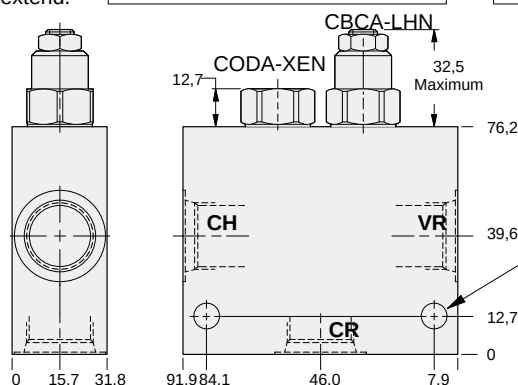
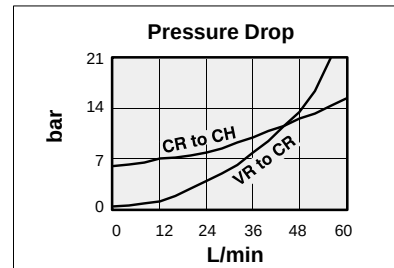
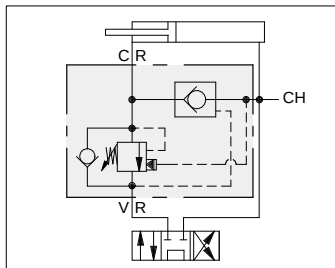
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDCC: 60 L/min maximum regenerative flow. Regeneration diminishes progressively above setting of CBCA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.50 NPTF	C		C/S	
SAE-10	K		K/S	
.50 BSPP	V		V/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.

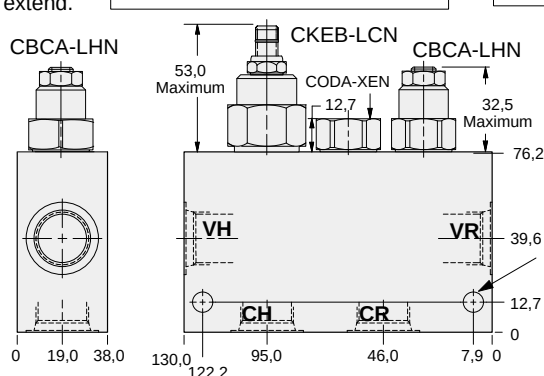
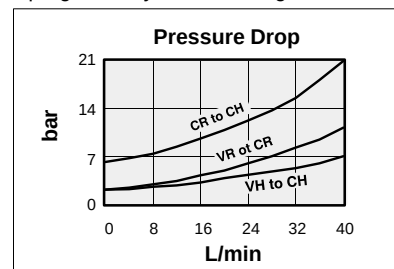
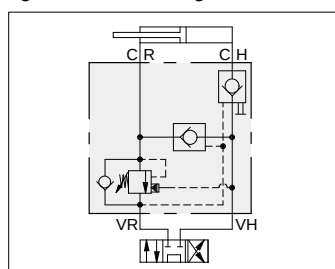


Mounting Holes:
8,6 diameter through holes
2 places.

YDCD: 40 L/min maximum regenerative flow, with load holding check valve. Regeneration diminishes progressively above setting of CBCA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.50 NPTF	C		C/S	
SAE-10	K		K/S	
.50 BSPP	V		V/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
8,6 diameter through hole
2 places.

13

OPTIONS		YDC* - LHN - A*	
FUNCTION		PORTS	
C	Less CKEB Load Holding Check	For Viton Seals Change LHN to LHV.	See Chart above
D	Includes CKEB Load Holding Check See Pg 4.16	For Viton Seals Change LHN to LHV.	Customer Specified Setting Stamped on Hex



REGENERATION ASSEMBLY PRESSURE SENSITIVE



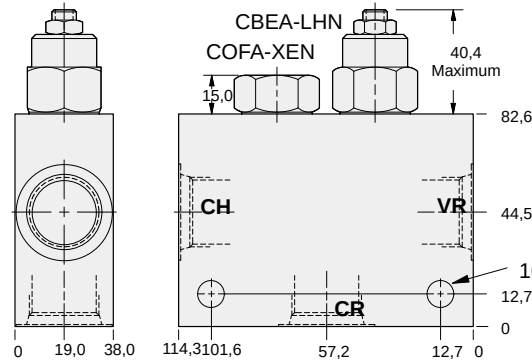
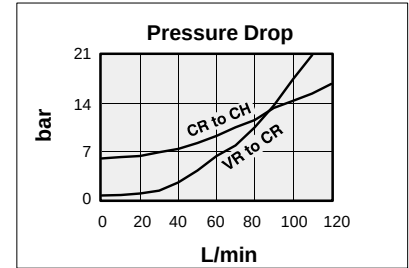
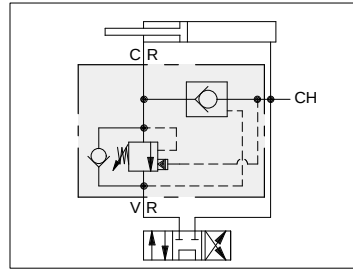
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDEC: 120 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBEA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.75 NPTF	D		D/S	
SAE-12	L		L/S	
.75 BSPP	W		W/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



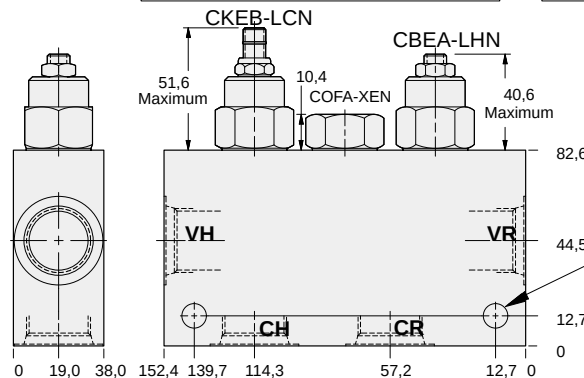
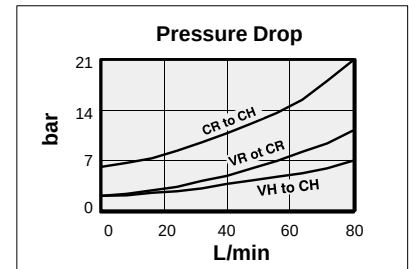
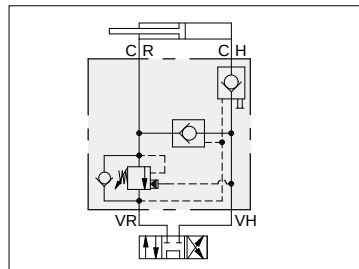
Mounting Holes:
10,7 diameter through hole.
2 places.



YDED: 80 L/min maximum total flow, with load holding check valve. Regeneration diminishes progressively above setting of CBEA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.75 NPTF	D		D/S	
SAE-12	L		L/S	
.75 BSPP	W		W/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
10,7 diameter through hole.
2 places.



OPTIONS

YDE* - LHN - A*

FUNCTION

- C** Less CKEB Load Holding Check
- D** Includes CKEB Load Holding Check See Pg 4.16

For Viton Seals Change LHN to LHV.
For Viton Seals Change LHN to LHV.

PORTS

See Chart above

Customer Specified Setting Stamped on Hex

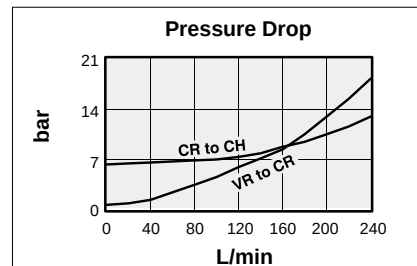
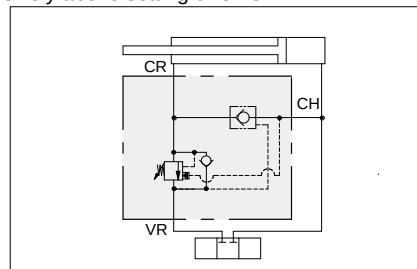
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

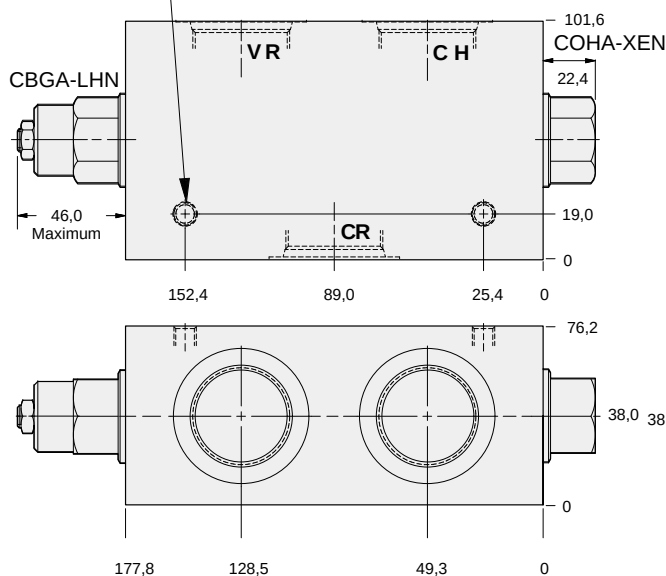
YDGC: 240 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBGA.

Mounting Hole Dimensions	Ports CR, CH & VR	ALUMINIUM		SG IRON	
		Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	D		D/S	
Inch	1.00 NPTF	E		E/S	
Inch	1.25 NPTF	F		F/S	
Inch	SAE-12	L		L/S	
Inch	SAE-16	M		M/S	
Inch	SAE-20	N		N/S	
Metric	.75 BSPP	W		W/S	
Metric	1.00 BSPP	X		X/S	
Metric	1.25 BSPP	Y		Y/S	
Inch	1.00" SAE Code 61	P		P/S	
Metric		P/M		P/T	

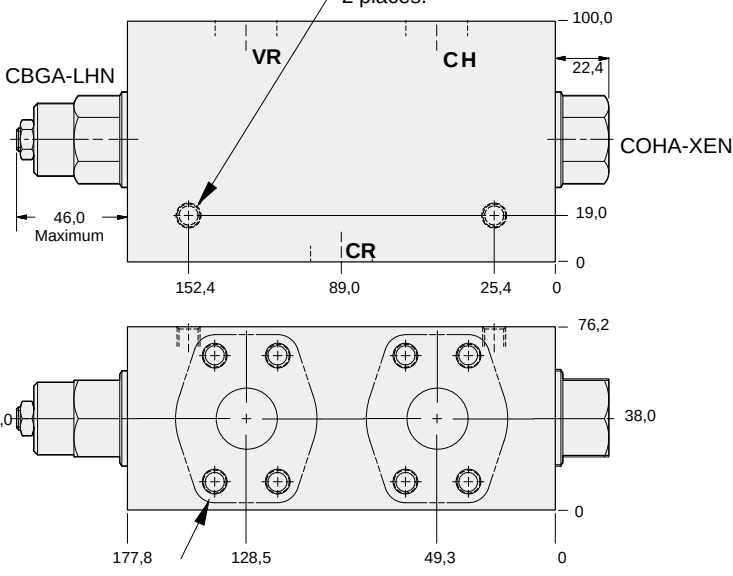
NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



1.00" SAE Code 61
4-Bolt Flange Pattern
3 places.

13

OPTIONS

YDGC - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above



REGENERATION ASSEMBLY PRESSURE SENSITIVE



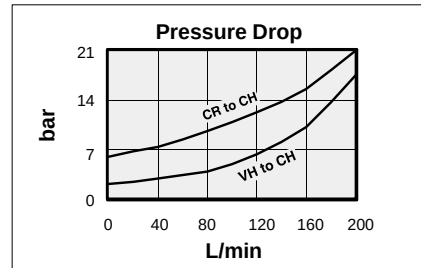
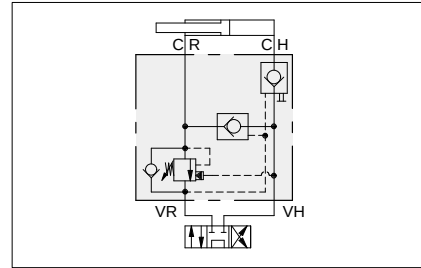
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and Ductile Iron rated to 350 bar.

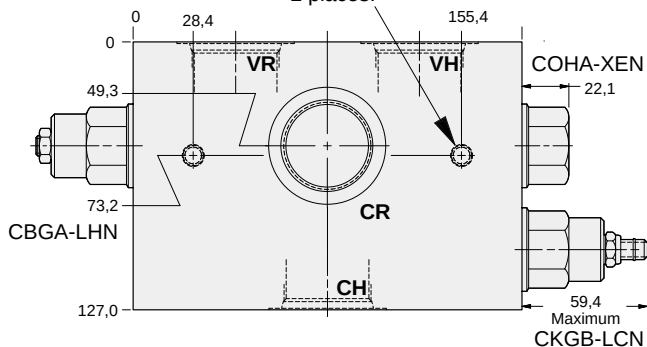
YDGD: 200 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBGA.

Mounting Hole Dimensions	Ports CH, CR & VR	ALUMINIUM		SG IRON	
		Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	D		D/S	
Inch	1.00 NPTF	E		E/S	
Inch	1.25 NPTF	F		F/S	
Inch	SAE-12	L		L/S	
Inch	SAE-16	M		M/S	
Inch	SAE-20	N		N/S	
Metric	.75 BSPP	W		W/S	
Metric	1.00 BSPP	X		X/S	
Metric	1.25 BSPP	Y		Y/S	
Inch	1.25" SAE Code 61	Q		Q/S	
Metric		Q/M		Q/T	

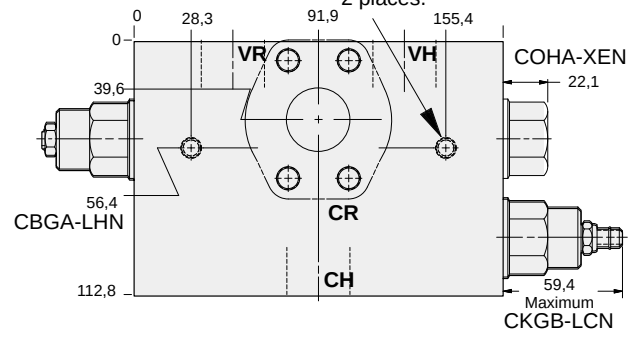
NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.



OPTIONS

YDGD - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above



REGENERATION ASSEMBLY PRESSURE SENSITIVE



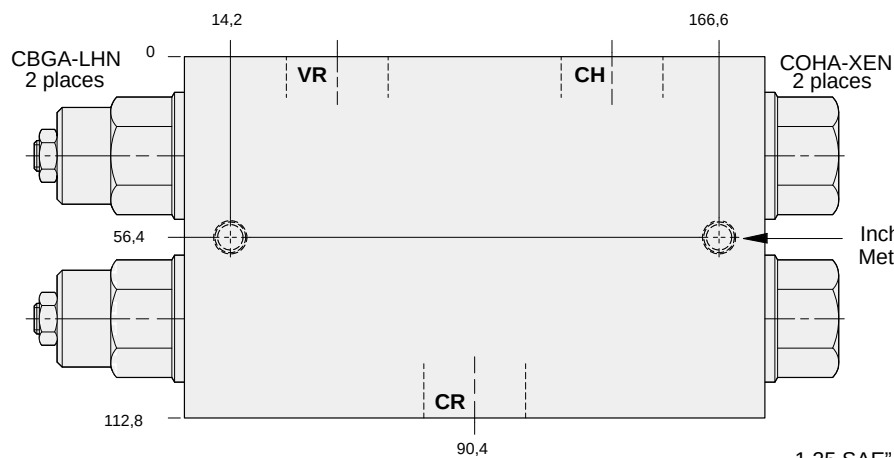
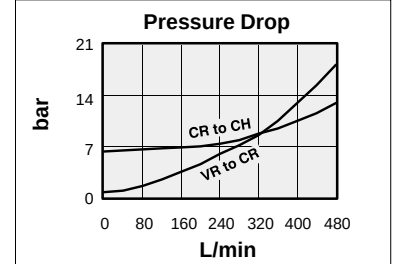
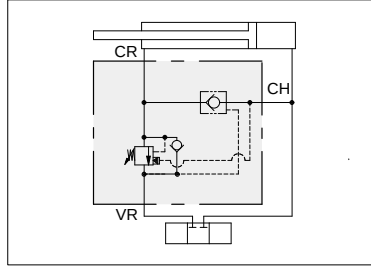
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

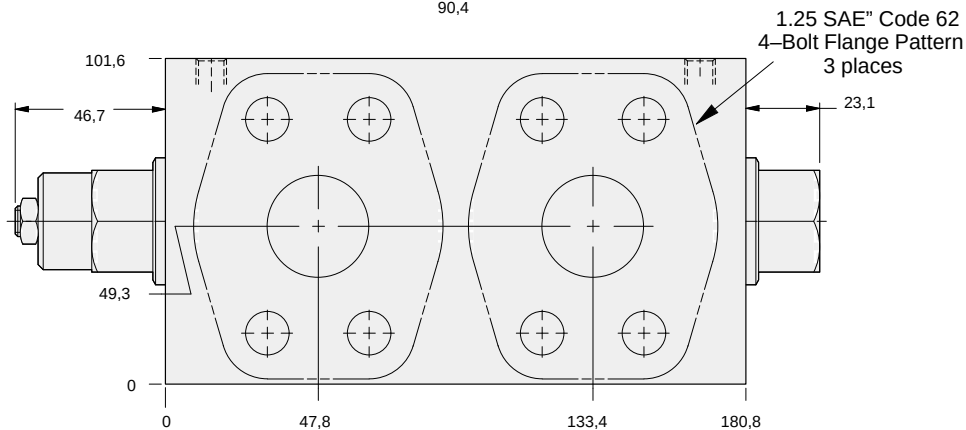
YDHC: 480 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBGA.

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
Inch	5		5/S	
Metric	5/M		5/T	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
2 places.



13

OPTIONS

YDHC - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above



REGENERATION ASSEMBLY PRESSURE SENSITIVE



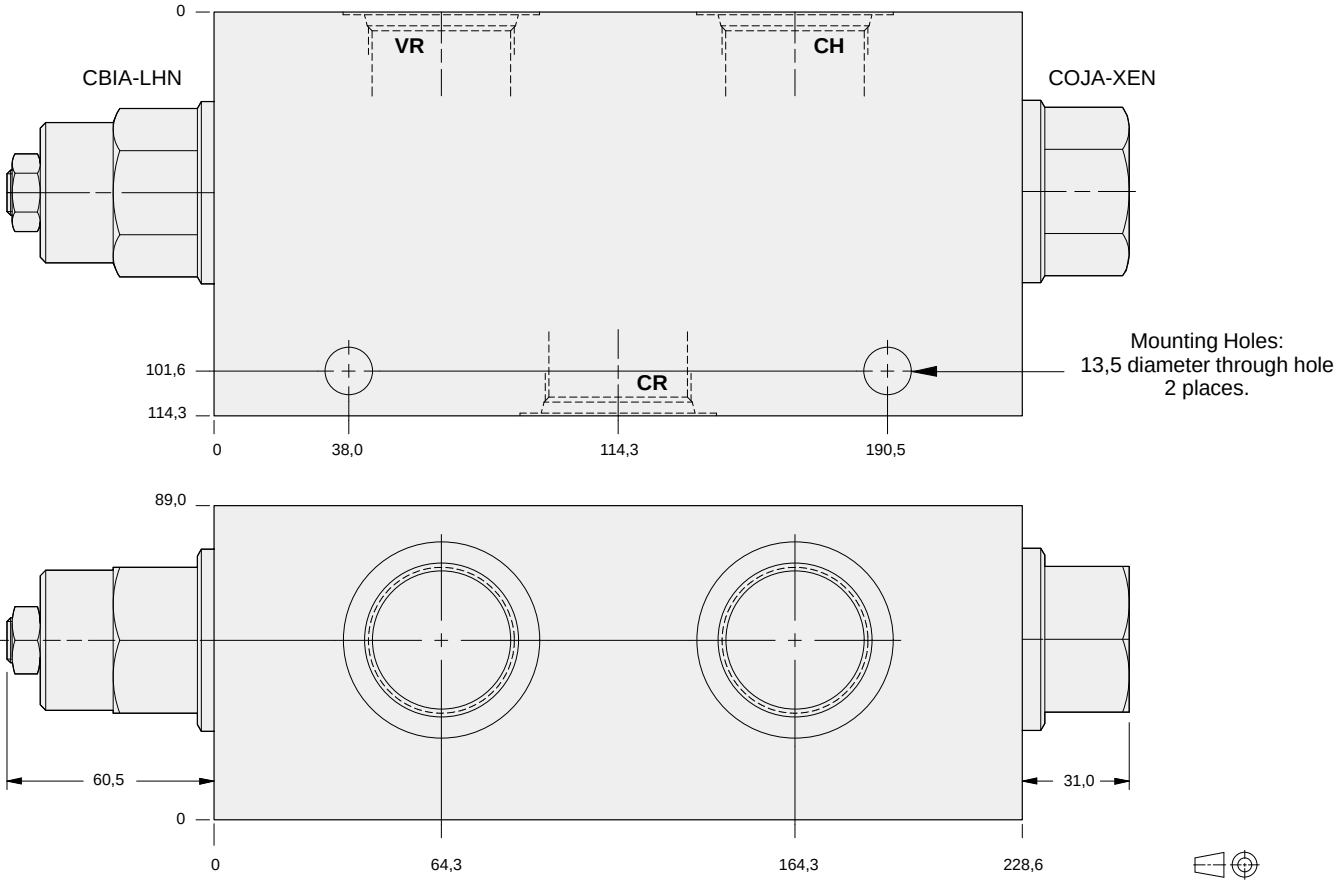
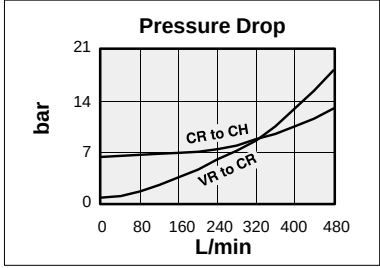
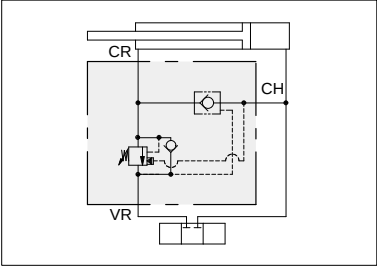
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDJC: 480 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBIA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
SAE-20	N		N/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



OPTIONS

YDJC - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above



REGENERATION ASSEMBLY PRESSURE SENSITIVE



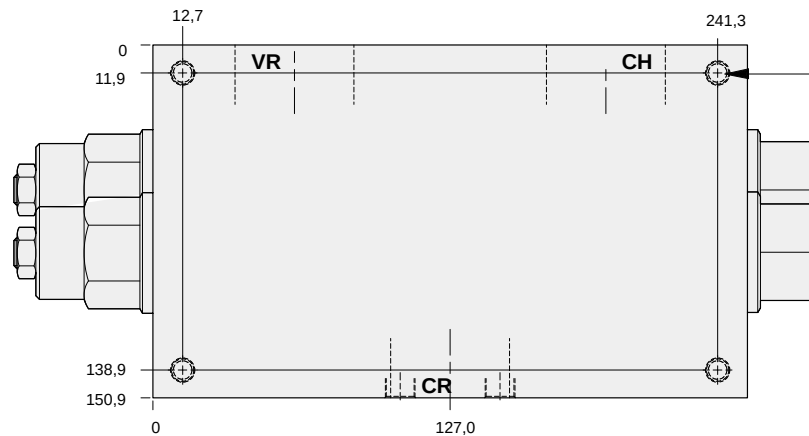
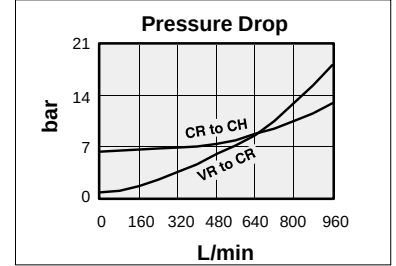
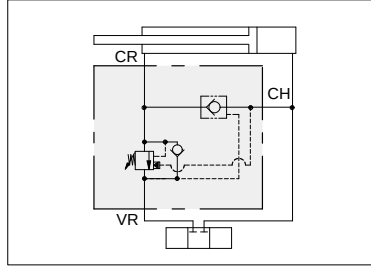
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDJC: 960 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBIA.

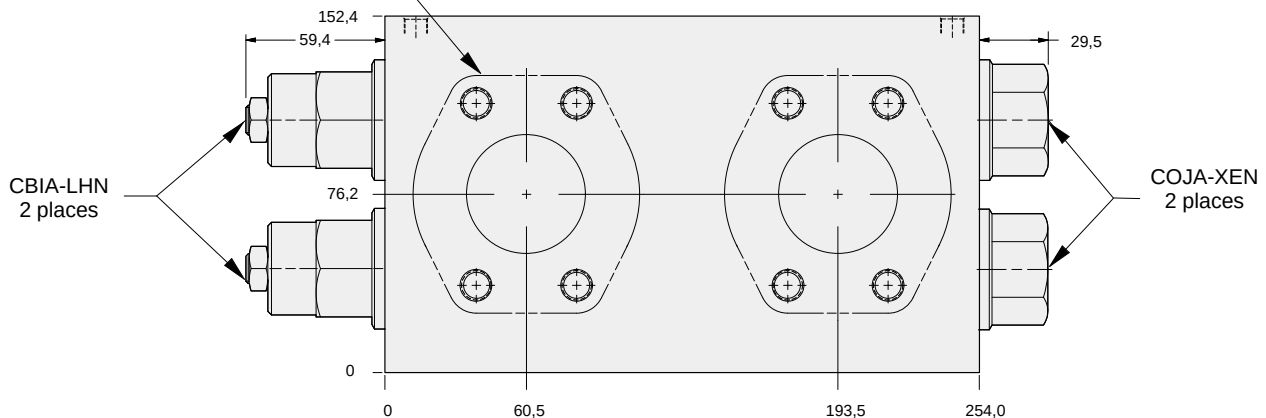
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
Inch	S		S/S	
Metric	S/M		S/T	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
3 places.



Refer to page 13.42 if load causes cylinder to extend.

OPTIONS

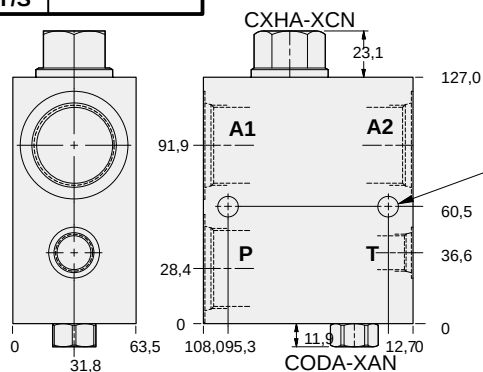
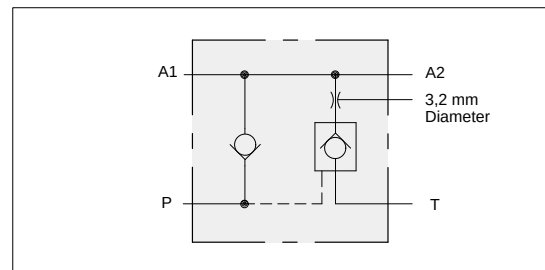
YDJC - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above

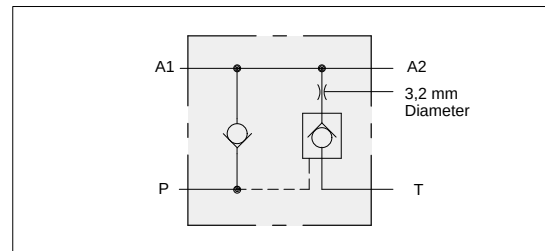
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Ports P, A1 & A2	Port T	ALUMINIUM		SG IRON	
		Port Code	List Price	Port Code	List Price
.75 NPTF	.50 NPTF	D		D/S	
1.00 NPTF	.50 NPTF	E		E/S	
1.25 NPTF	.50 NPTF	F		F/S	
SAE-12	SAE-8	L		L/S	
SAE-16	SAE-8	M		M/S	
SAE-20	SAE-8	N		N/S	
.75 BSPP	.50 BSPP	W		W/S	
1.00 BSPP	.50 BSPP	X		X/S	
1.25 BSPP	.50 BSPP	Y		Y/S	

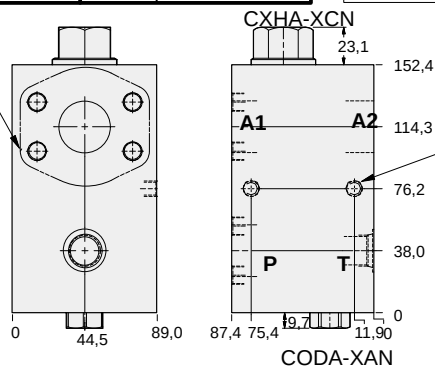


Mounting Holes:
10,7 diameter through hole.
2 places.

Mounting Hole Dimensions	Ports A1, A2, P Code 61	Port T	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	1.00"	SAE-8	P		P/S	
Metric	1.00"	.50 BSPP	P/M		P/T	
Inch	1.25"	SAE-8	Q		Q/S	
Metric	1.25"	.50 BSPP	Q/M		Q/T	



Code 61
4-Bolt Flange Pattern
3 places.



Mounting Holes:
(opposite sides)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.

OPTIONS

YCHE - XAN - A*

For Viton Seals Change
XAN to XAV.

PORTS
See Chart
above



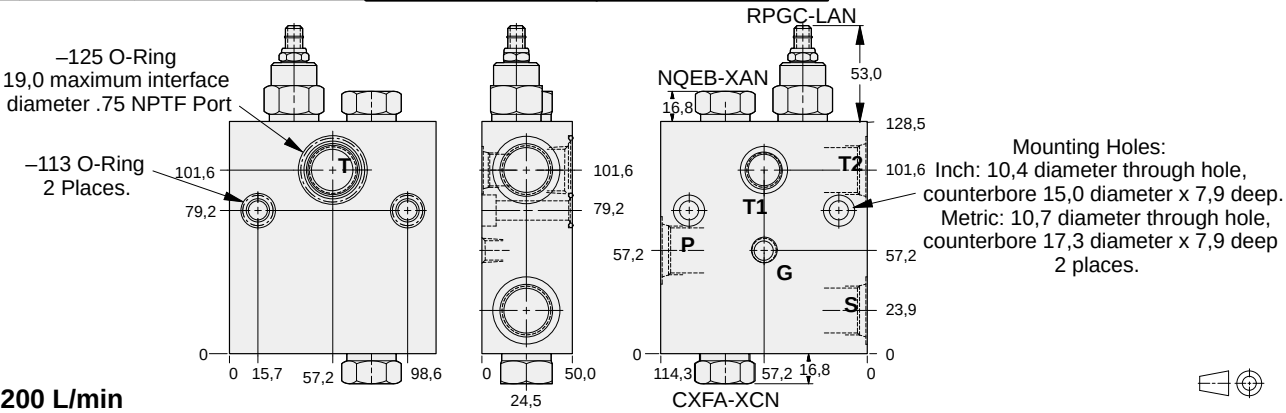
PUMP CIRCUIT CONTROL ASSEMBLY SUITABLE FOR RESERVIOR MOUNTING FOR USE WITH MULTIPLE PUMP CIRCUITS

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YFRC: 95 L/min

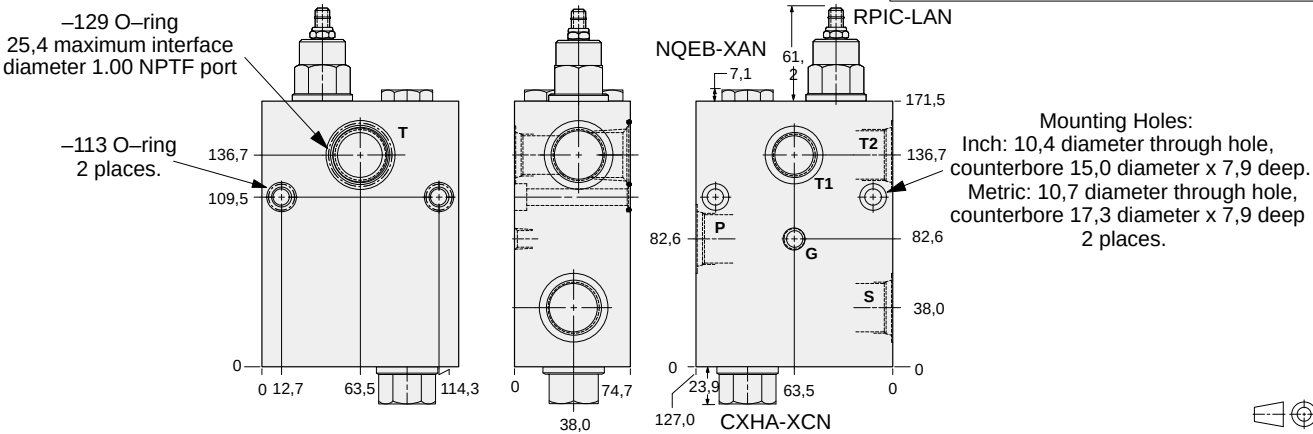
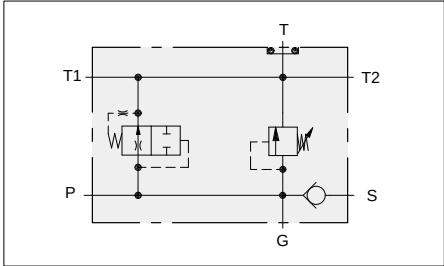
Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	.50 NPTF	.25 NPTF	D		D/S	
Inch	SAE-12	SAE-8	.25 NPTF	L		L/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	

YFRC and YFRE valves are suitable for multiple pump circuits when connected directly to each pump in the system. They provide air-bleed and relief protection for each pump and the check valve position isolates the other pumps from the valve assembly.



YFRE: 200 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	1.00 NPTF	.75 NPTF	.25 NPTF	E		E/S	
Inch	SAE-16	SAE-12	.25 NPTF	M		M/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	



OPTIONS

YFR* - LAN - A*

FLOW CAPABILITY

- C** 95 L/min
RPGC Cartridge
- E** 200 L/min
RPIC Cartridge

For Viton Seals Change
LAN to LAV.

For Viton Seals Change
LAN to LAV.

PORTS

See Chart
above

Customer Specified Setting
Stamped on Hex



PUMP CIRCUIT CONTROL ASSEMBLY SUITABLE FOR RESERVIOR MOUNTING FOR USE WITH SINGLE PUMP CIRCUITS

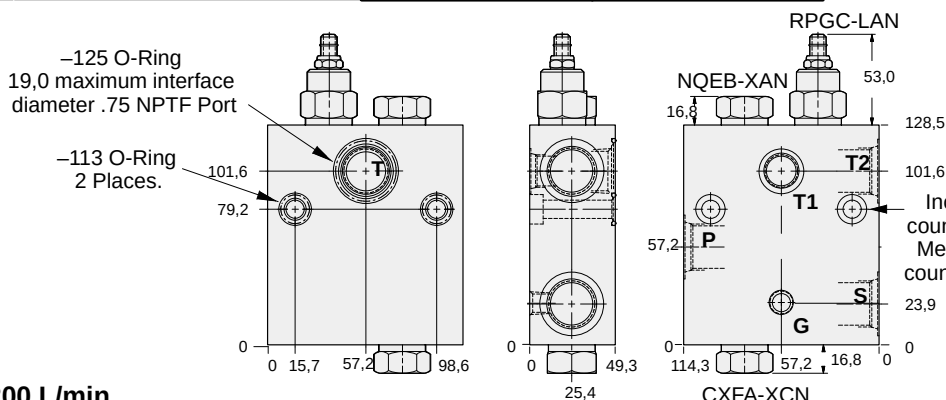


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YFRD: 95 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	.50 NPTF	.25 NPTF	D		D/S	
Inch	SAE-12	SAE-8	.25 NPTF	L		L/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	

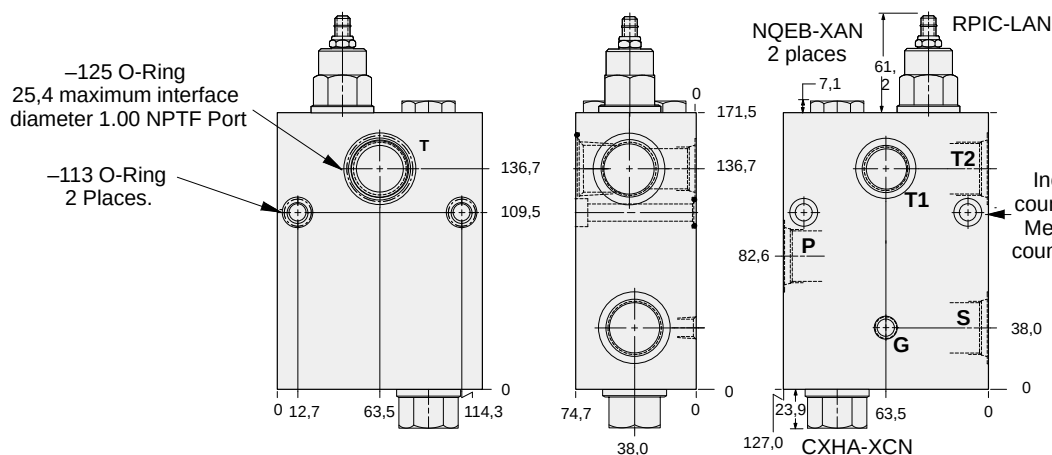
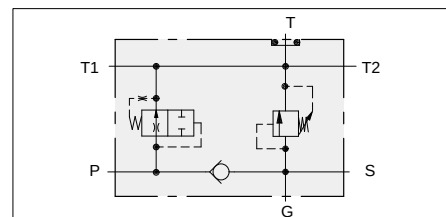
The SUN pump circuit manifold contains an air-bleed and start up valve, main system relief, and a check valve for use with any basic power unit. O-ring seals for one of the tank ports and bolt mounting holes are provided for direct reservoir mounting. All T ports are also threaded.



Mounting Holes:
Inch: 10.4 diameter through hole, counterbore 15.0 diameter x 7.9 deep.
Metric: 10.7 diameter through hole, counterbore 17.3 diameter x 7.9 deep 2 places.

YFRF: 200 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	1.00 NPTF	.75 NPTF	.25 NPTF	E		E/S	
Inch	SAE-16	SAE-12	.25 NPTF	M		M/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	



Mounting Holes:
Inch: 10.4 diameter through hole, counterbore 15.0 diameter x 7.9 deep.
Metric: 10.7 diameter through hole, counterbore 17.3 diameter x 7.9 deep 2 places.

OPTIONS

YFR* - LAN A*

FLOW CAPABILITY

D 95 L/min
RPGC Cartridge

F 200 L/min
RPIC Cartridge

Customer Specified Setting
Stamped on Hex

For Viton Seals Change
LAN to LAV.

For Viton Seals Change
LAN to LAV.

PORTS

See Chart
above



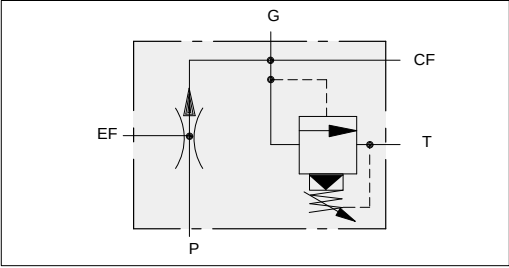
**PRESSURE-COMPENSATED PRIORITY FLOW CONTROL ASSEMBLY
WITH RELIEF ON CONTROLLED FLOW PORT**
Customer Must Specify Flow ⊗



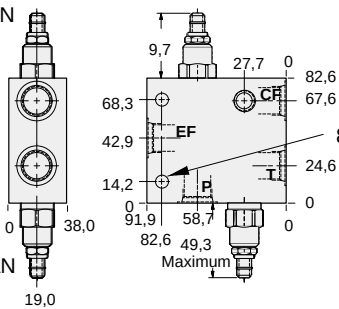
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YRDR: Up to 23 L/min Priority Flow.

Ports EF & P	Ports CF & T	Gauge Port	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	A		A/S	
.375 NPTF	.375 NPTF	.25 NPTF	B		B/S	
.50 NPTF	.375 NPTF	.25 NPTF	C		C/S	
SAE-6	SAE-6	.25 NPTF	I		I/S	
SAE-8	SAE-8	.25 NPTF	J		J/S	
SAE-10	SAE-8	.25 NPTF	K		K/S	
.25 BSPP	.25 BSPP	.25 BSPP	T		T/S	
.375 BSPP	.375 BSPP	.25 BSPP	U		U/S	
.50 BSPP	.375 BSPP	.25 BSPP	V		V/S	



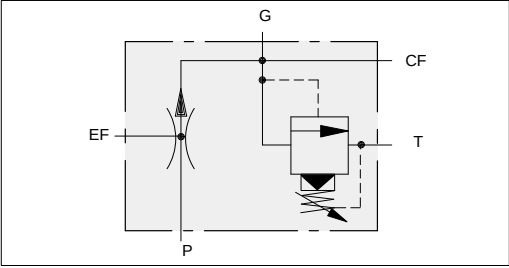
FRCA-LAN



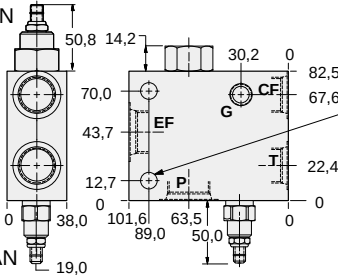
Mounting Holes:
8,6 diameter through holes
2 places.

YREM: Up to 45 L/min Priority Flow.

Ports EF & P	Ports CF & T	Gauge Port	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
.50 NPTF	.50 NPTF	.25 NPTF	C		C/S	
.75 NPTF	.50 NPTF	.25 NPTF	D		D/S	
SAE-10	SAE-10	.25 NPTF	K		K/S	
SAE-12	SAE-10	.25 NPTF	L		L/S	
.50 BSPP	.50 BSPP	.25 BSPP	V		V/S	
.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	



FRCA-LAN



Mounting Holes:
10,4 diameter through holes
2 places.

RPEC-LAN

OPTIONS

YR - LAN - ****

FLOW CAPACITY

- DR** Up to 23 L/min For Viton Seals Change LAN to LAV.
EM Up to 45 L/min Customer Specified Setting Stamped on Hex

FLOW ADJUSTMENTS

- L** Tuning Adjust
X Non-adjustable

PORTS

See Chart above

⊗ *Customer must specify flow.
0,4 to 45 L/min*



PRESSURE-COMPENSATED PRIORITY FLOW CONTROL ASSEMBLY WITH RELIEF ON CONTROLLED FLOW PORT

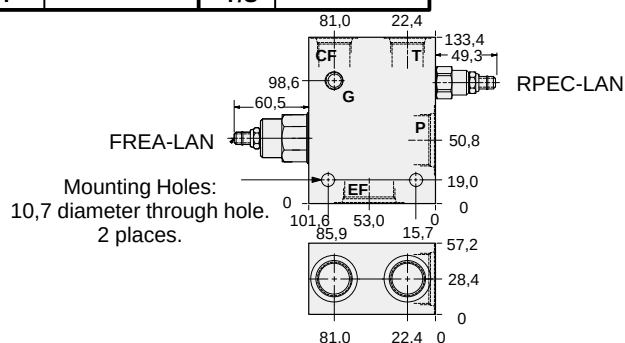
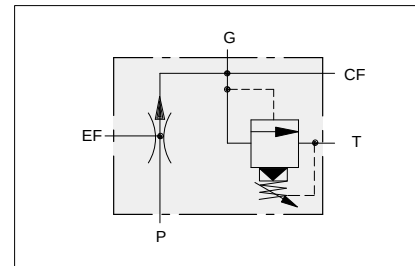


Customer Must Specify Flow ⊗

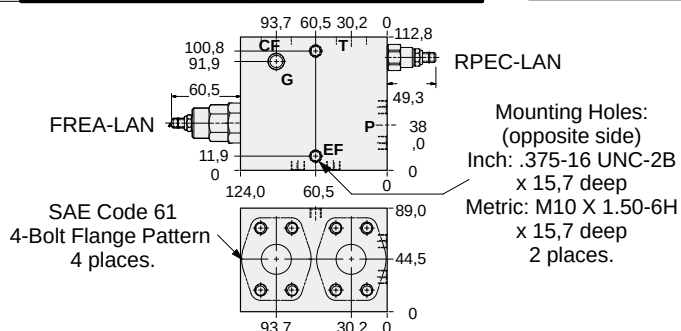
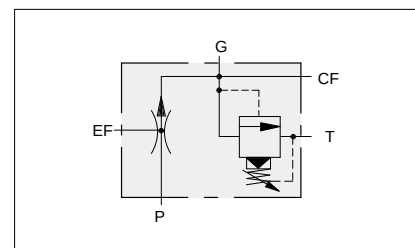
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YRFF: Up to 95 L/min Priority Flow.

Ports EF & P	Ports CF & T	Gauge Port	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	D		D/S	
1.00 NPTF	.75 NPTF	.25 NPTF	E		E/S	
1.25 NPTF	.75 NPTF	.25 NPTF	F		F/S	
SAE-12	SAE-12	.25 NPTF	L		L/S	
SAE-16	SAE-12	.25 NPTF	M		M/S	
SAE-20	SAE-12	.25 NPTF	N		N/S	
.75 BSPP	.75 BSPP	.25 BSPP	W		W/S	
1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	
1.25 BSPP	.75 BSPP	.25 BSPP	Y		Y/S	



Mounting Hole Dimensions	Ports EF & P Code 61	Ports CF & T Code 61	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	1.00"	1.00"	.25 NPTF	P		P/S	
Metric	1.00"	1.00"	.25 BSPP	P/M		P/T	
Inch	1.25"	1.00"	.25 NPTF	Q		Q/S	
Metric	1.25"	1.00"	.25 BSPP	Q/M		Q/T	



OPTIONS

YRFF - LAN - **

FLOW ADJUSTMENT

- L** Tuning Adjust
- X** Non-adjustable

For Viton Seals Change
LAN to LAV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above

⊗ *Customer must specify flow.
0.8 to 95 L/min*



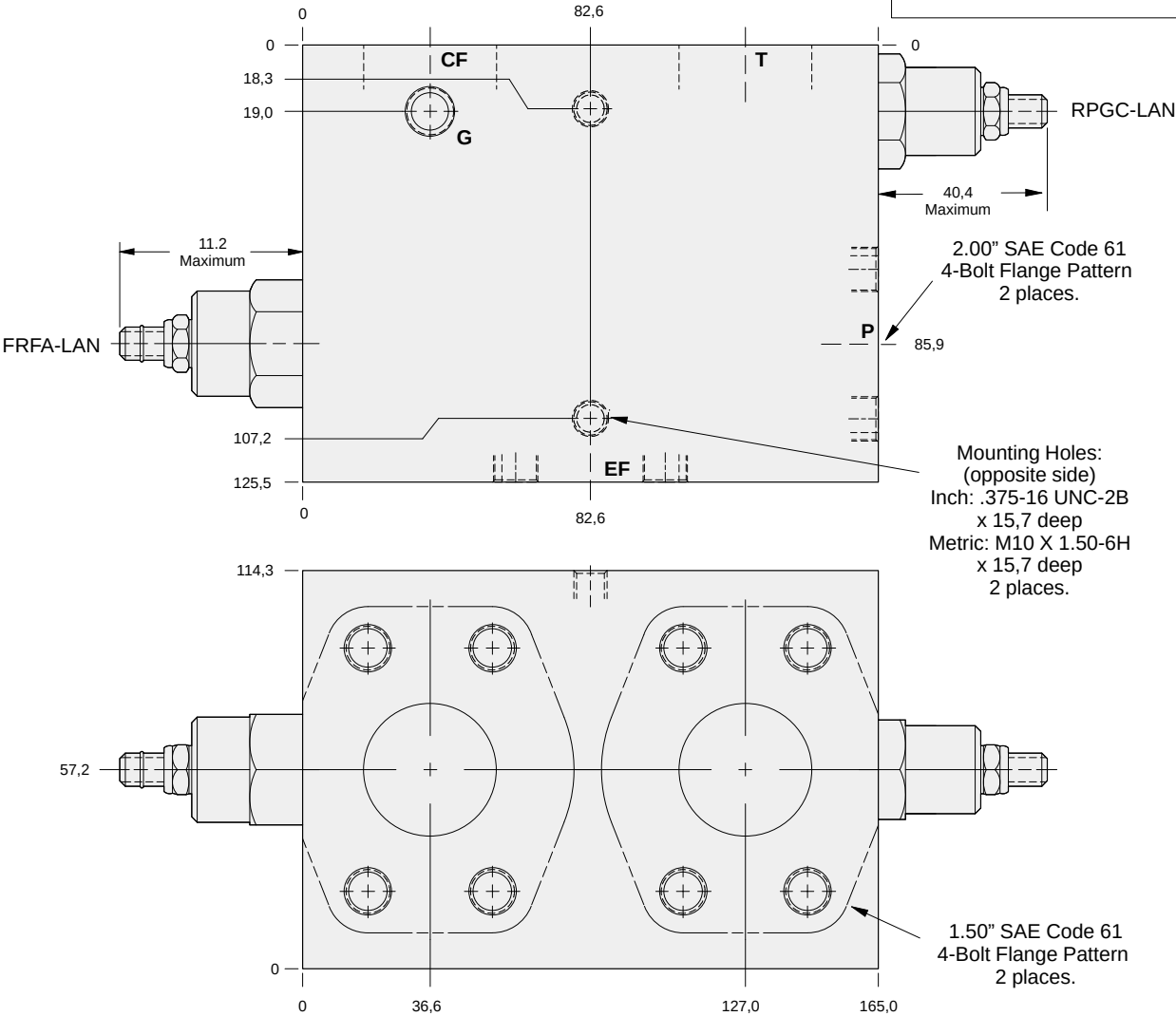
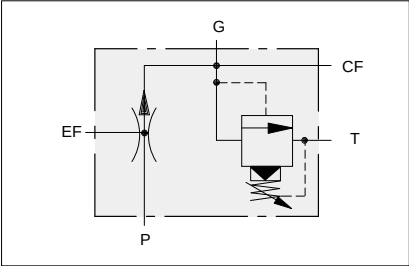
**PRESSURE-COMPENSATED PRIORITY FLOW CONTROL ASSEMBLY
WITH RELIEF ON CONTROLLED FLOW PORT**
Customer Must Specify Flow ⊗



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YRHF: Up to 200 L/min Priority Flow.

Mounting Hole Dimensions	Ports EF & P Code 61	Ports CF & T Code 61	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	2.00"	1.50"	.25 NPTF	S		S/S	
Metric	2.00"	1.50"	.25 BSPP	S/M		S/T	



OPTIONS

YRHF - LAN - **

FLOW ADJUSTMENT

L Tuning Adjust

X Non-adjustable

For Viton Seals Change
LAN to LAV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above

⊗ **Customer must specify flow.
0,8 to 200 L/min**