

1" GEN 2 SPM Cartridge & Valve Product Line

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1" GEN 2 SPM Cartridge & Valve Product Line

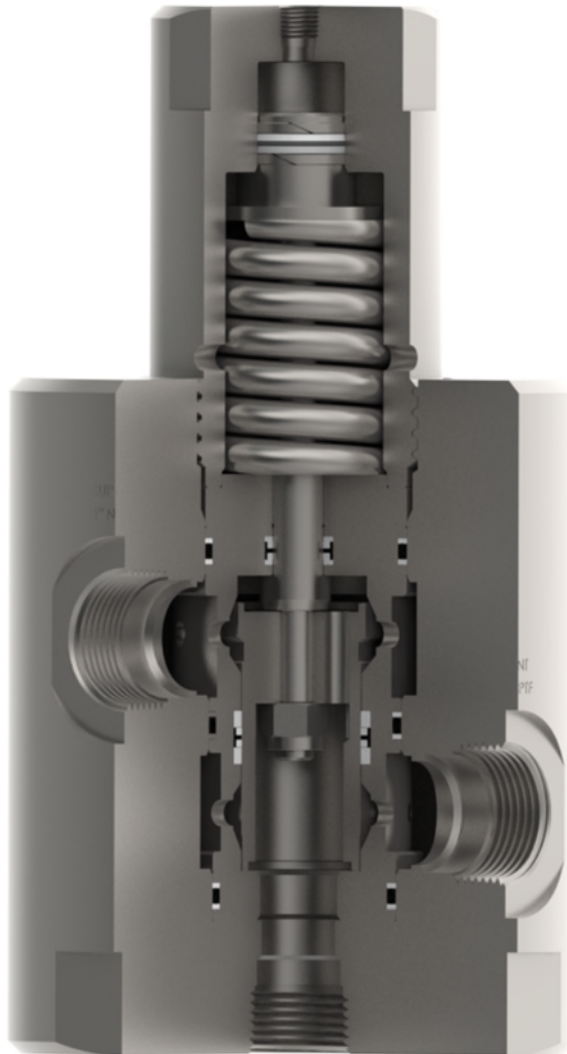


Gilmore announces the new 1" GEN 2 SPM product line for critical offshore and subsea applications. The 1" GEN 2 SPM has been redesigned with significant improvements over its predecessor. The 1" GEN 2 SPM fits within the same cavity & footprint as the legacy SPM, allowing direct replacement in existing Gilmore SPM manifolds. Gilmore's proprietary GEN 2 SPM cartridge technology provides an order of magnitude improvement in cycle life.

Features and Benefits:

- Qualification exceeds API 16D requirements –
 - Two separate full flow tests at 2500 cycles each
- Proprietary bi-directional SPM cartridge performs in both Normally Closed or Normally Open applications
- Reduces interflow
- Reduces pressure spikes
- Improved valve materials:
 - 316 SS Body and Spring
 - Nitronic 50 Piston Rod
 - Nitronic 60 Seal Sleeve and Cage
 - Aluminum Bronze Bushing
 - Shouldered & Torqued Nylon Lock Nut
 - Dynamic T-Seals
 - HNBR Soft Seals with PEEK Double Back-up Rings
 - Delrin 511P Top and Bottom Seats with increased thickness
 - A286 Gr 660 Capscrews
 - Wide array of options available for body & port style, and customized manifolded assemblies
 - Patent Pending

**Figure 1. PN 29109: 1" GEN 2
5000 psi Supply**



SPM Valve, N.C., 1" NPT

Gilmore has exceeded API 16D requirements by qualifying the new 1" GEN 2 SPM designs to multiple endurance qualification tests to 2500 cycles, at 5000 psi and 150 gpm, with 1% - 4% water glycol test fluid.

The new 1" GEN 2 SPM cartridge & valve have the identical cavity and valve footprint dimensions as the Gilmore legacy 1" SPM, allowing simple drop-in replacement to existing installations.

As a result of the new Gilmore 1" GEN 2 SPM product line, please note that new sales of the legacy 1" SPM cartridge and valve part numbers listed below will be discontinued as of May 7, 2021. The new Gilmore 1" GEN 2 SPM cartridge and valves are now available as replacements for the legacy 1" SPM cartridge and valves.

After they are discontinued, Gilmore will continue to support the discontinued legacy 1" SPM product line:

- Gilmore will continue providing repair kits and seal kits in support of discontinued legacy 1" SPM Cartridge and Valves for a minimum of 3 years. The legacy 1" SPM Cartridge and Valves listed below are field repairable.
- Gilmore Aftermarket will continue to support discontinued legacy products with factory failure analysis and repair services for a minimum of 3 years.

Please note that GEN2 repair kits **are not** interchangeable with legacy repair kits and cannot be used in legacy SPMs. Please contact Gilmore Customer Service for any assistance needed while selecting the GEN 2 replacement valve part number.

Table 1. New and Legacy 1 inch SPM Cartridge and Valve Part Number Cross Reference:

Item	Legacy Description	Legacy Valve PN	Legacy Repair Kit PN*	GEN 2 Cartridge or Valve Description	GEN 2 Valve PN
1.1	MVA, 4-Way, 1" SPM, 5000 psi, 1/4 NPT Pilot Port, 1 NPT Block Ports	147581	27168-2 RK 27167-2 RK	MVA, 4-Way, 1" GEN 2 SPM, 5000 psi, 1/4 NPT Pilot Port, 1 NPT Block Ports	29123
1.2	Valve, 1" SPM, N.O., 5000 psi, 1/4 NPT Pilot Port, 1 NPT Block Ports	169129	27168-2 RK	Valve, 1" GEN 2 SPM, N.O., 5000 psi, 1/4 NPT Pilot Port, 1 NPT Block Ports	29111
1.3	Valve, 1" SPM, N.C., 5000 psi, 1/4 NPT Pilot Port, 1 NPT Block Ports	27612-1	27167-2 RK	Valve, 1" GEN 2 SPM, N.C., 5000 psi, 1/4 NPT Pilot Port, 1 NPT Block Ports	29109
1.4	Cartridge, 1" SPM, N.O., 5000 psi, 1/4 NPT Pilot Port	27167-2	27167-2 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29110
1.5	Cartridge, 1" SPM, N.C., 5000 psi, 1/4 NPT Pilot Port	27168-2	27168-2 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29110
1.6	Cartridge, 1" SPM, N.O., 5000 psi, 1/4 NPT Pilot Port, Delrin Seats	27167-3	27167-3 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29110
1.7	Cartridge, 1" SPM, N.C., 5000 psi, 1/4 NPT Pilot Port, Delrin Seats	27168-3	27168-3 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29110
1.8	Cartridge, 1" SPM, N.O., 5000 psi, 1/4 NPT Pilot Port, Delrin Seats	28478	28478 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29110
1.10	Cartridge, 1" SPM, N.C., 5000 psi, 1/4 NPT Pilot Port, Delrin Seats	28477	28477 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29110
1.11	Cartridge, 1" SPM, N.C., 5000 psi, 1/4 SAE Pilot Port	28579	28579 RK	Cartridge, 1" GEN 2 SPM, N.O. & N.C., 5000 psi, 1/4 NPT Pilot Port	29122

*The GEN 2 valve repair kit part number will match the category part numbers with a space and (RK) at the end.

*The GEN 2 valve seal kit part number will match the category part numbers with a space and (SK) at the end.



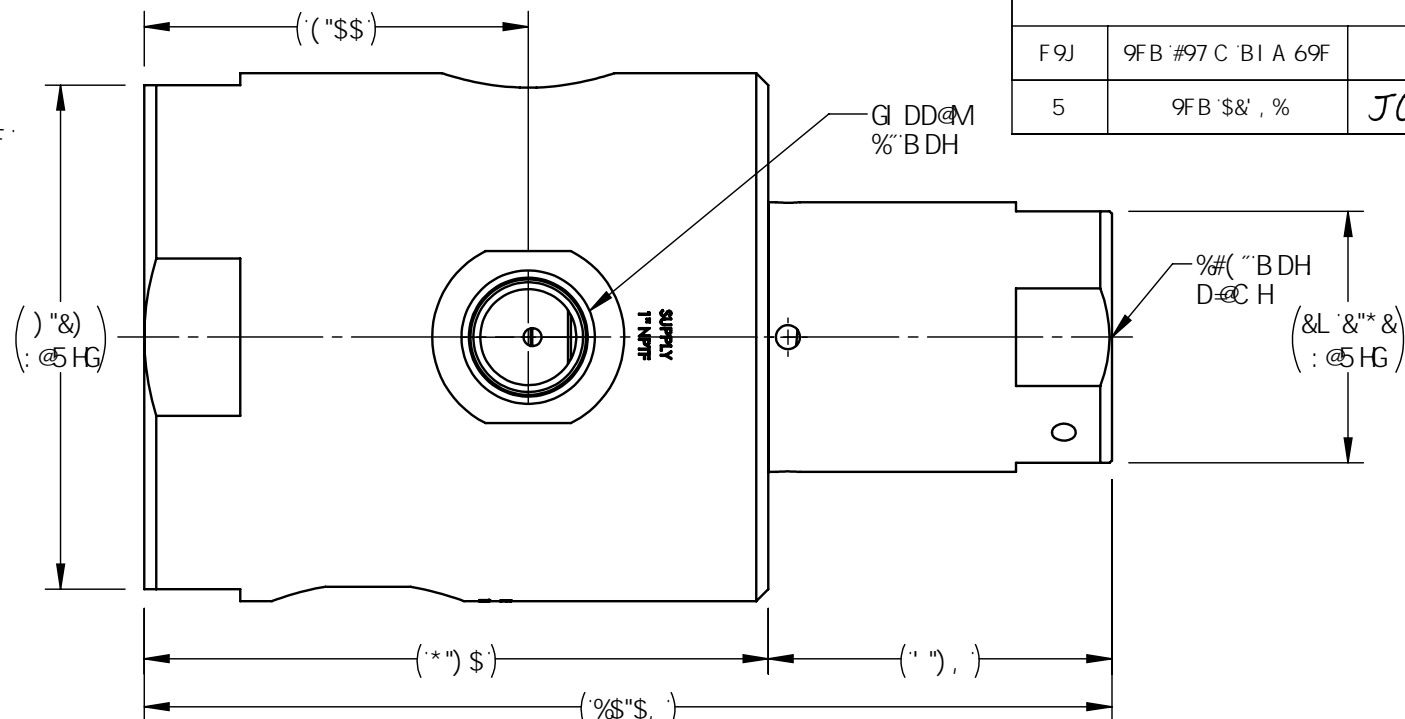
If a new Gilmore 1-1/2 inch GEN 2 SPM part number is not listed above for a specific legacy part number, please contact Gilmore Customer Service to request a quotation and creation of a new GEN 2 part number.

Please contact Gilmore Customer Service to request drawings and quotations for these SPMs at info@gilmore.com.

BC H9G

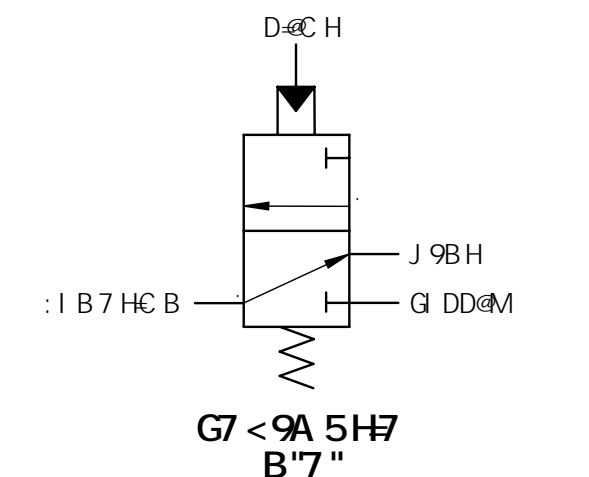
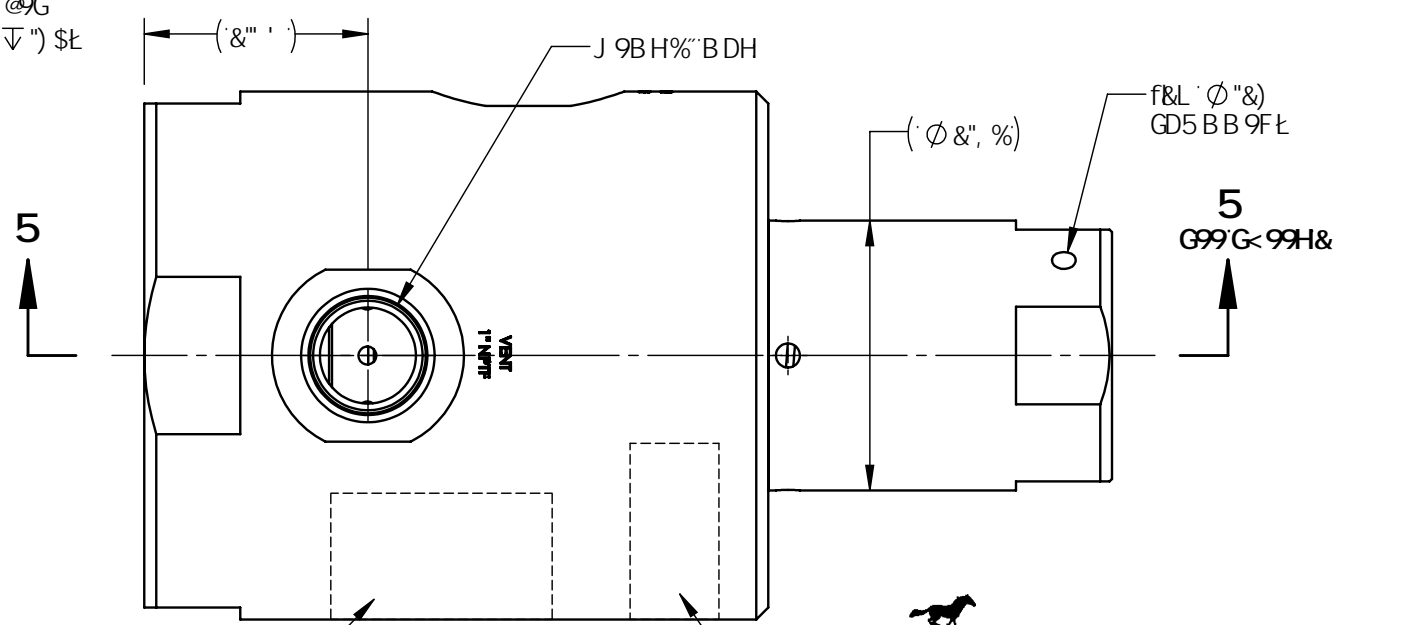
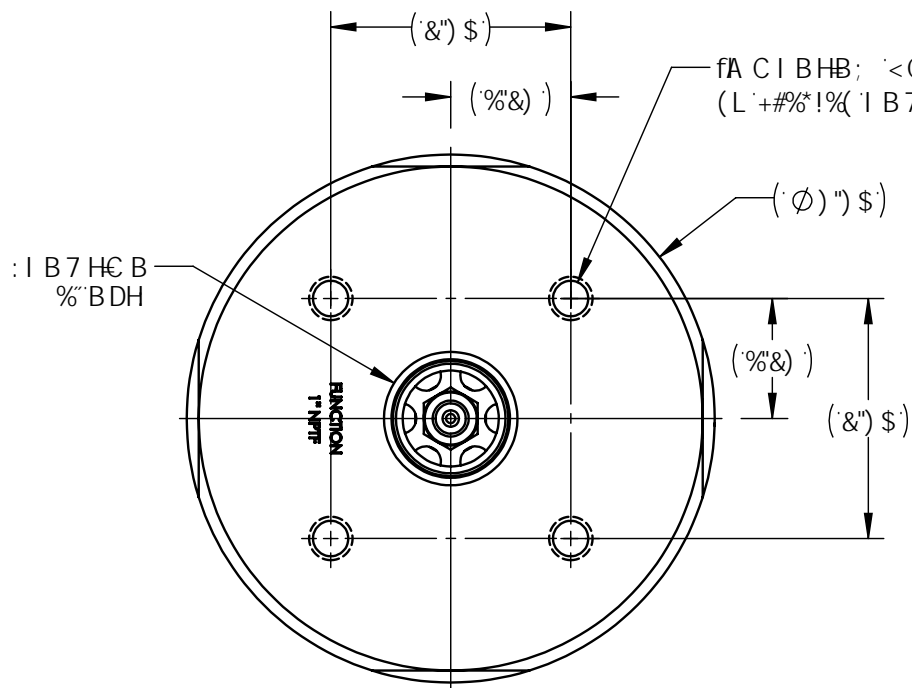
A 5F?B; .A 5F?7CA DCB9BHK #k:5GG9A 6@MK "C"
5G<CK B'CB'k:97CA DCB9BH8F5K B;
A 5F?B; .A 5F?5G<CK B'I GB; .@G9F 9H7 <'CF'7CA DI H9F'
7CBHFC @98'8CHD99B'A 5F?B; 'A 57<B9Z"\$* '<÷ <
A B'7<5F57H9FG"
' :CF'6CHCA 'G95@F9A CJ5@I G9'HC C @5H@%\$\$\$!\$\$\$&"
(" Lž-B'7C @A B'89D=7HG'D5FHG-B'G95@? #I&- %8\$G?"
)" Lž-B'7C @A B'89D=7HG'D5FHG-B'F9D5F'? #I&- %8\$F?"
* HC FEI 9'75FH F-B; 9'HC " \$\$:H@G-B'A 5B÷C @B'6@7?
I GB; 'GD97-5@HC C @5H@%\$\$\$
+ 5GG9A 6@MDFC 798I F9.) \$&, &
G5B85F8':5HDFC 798I F9.) \$&, '
9LH9B898':5HDFC 798I F9.) \$&, ('
G9FJ 79'A 5BI 5@) %\$&*

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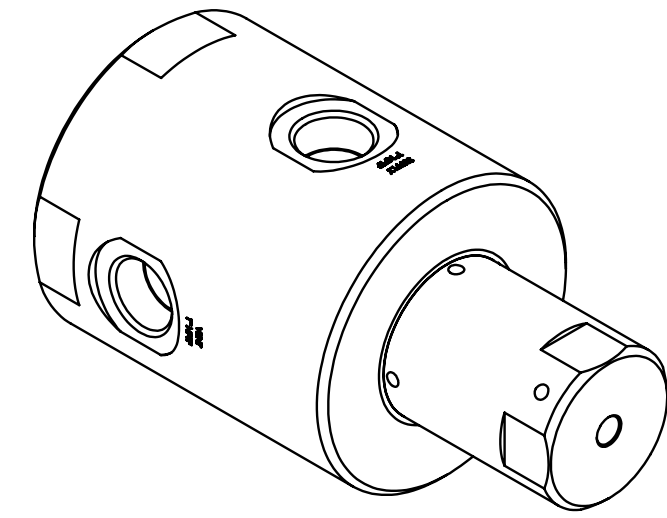


DF9GGI F985H5
GI DD@MA 5K D.) \$\$\$DG=
D@C HA 5K D.) \$\$\$DG=
5H) \$\$\$DG=GI DD@MF97CA A 9B898
A B A I A 'D@C HDF9GGI F9.) \$\$\$DG=
5H' \$\$\$DG=GI DD@MF97CA A 9B898
A B A I A 'D@C HDF9GGI F9.) \$\$\$DG=
: @K '85H5
7j '1',
A 5L: @K '75D57 +M%+); DA
: @-8G "%LK 5H9F'65G98'8F @B;
..... 7CBHFC @: @-8"
..... &'LA-B9F5@C @65G98'8F @B;
..... 7CBHFC @: @-8"
DC FHG
GI DD@M %BDH
: I B7HC B. %BDH
J 9BH %BDH
D@C H %H("'BDH
: 9B9F5@85H5
H9A D9F5H F9F5B; 9. &: 'HC %9\$&:
5DDFC L'K 9÷ <H'(' ' @G
: 9@8'G9FJ 7956@

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&- %\$-
J 9F'f5L'J 9FG@B' L
fG9F-5@BI A 69F!
G5A 9'G#B'5G75FH F-B; 9L
D5H9BHD9B8-B;
) \$\$\$DG=
fB5H9'C: 'A:; L
G99'G<C D'HF5J 9@F
'CF'588+HC B5@
-B: C'F9E I F98



A 5F?K #k:@; C'5B8
7CA D5BM-B: CFA 5HC B

D5H9BHD9B8-B;

A 5H9F-5@ G99D5FHG'CB-B8 ÷ '6CA		8A 9BGC BG5B8'HC @F5B79G5F9 B-B7<9GD9F'5GA 9M@(') A I%-('' I B @GGC H: 9FK @9GD97 ÷ 98. %HC @F5B79G "L: ±% "LL: ±\$% 5B: @G ±)" &G F: 579H9LH F9. ** ✓		5DDFCJ5@ 8F5K B'6M JOP 85H9 4/09/20 7<97?98'6M CMcf 85H9 4-13-20 9B: B99F AQP 85H9 4/10/20 9FB'BI A 69F \$&', % \$%#&- #&\$ 85H9		Gilmore 9B; B99F-B; a praver company	
7CB8+HC B.		'L7CF58-5@: 95H F9GG<5 @69 © K #k-B "\$%\$ (L 6F95? G<5FD 98; 9G"\$%\$) L BH9FB5@F58=G<5 @69"\$%\$ 'A 5L *L 8F @DC-BHGC DHC B5@K <9B'G<CK B I BGD97 ÷ 98Z5 @8F @DC-BH5B; @G G<5 @69 69HK 99B -S'1%\$*		Hk9-B: CFA 5HC B'7CBH5-B98-B'k-68F5K-B: 6Hk9 GC @DFC D9FHMC:; @A CF9J5@97C I B @GGC H: 9FK @9 G5H98" 5BMF9DFC 8I 7HC B-B' D5FHCFK <C @K #kC I H Hk9K F#H9B D9FA @G@B C:; @A CF9J5@97C @DFC<6H98"		J 5@ 9Z'%žGDA ž; 9B &žB'7'ž %"BDH '6@7? DC FHG %H("' BDH 'D@C HDC FH	
HF95HA 9BH						GAP 8K; 'BC	
DFC 798I F9'BI A 69F.						6 &- %\$- 5	
						G75@ % (Gc JK cf_g G<99H % C: &	

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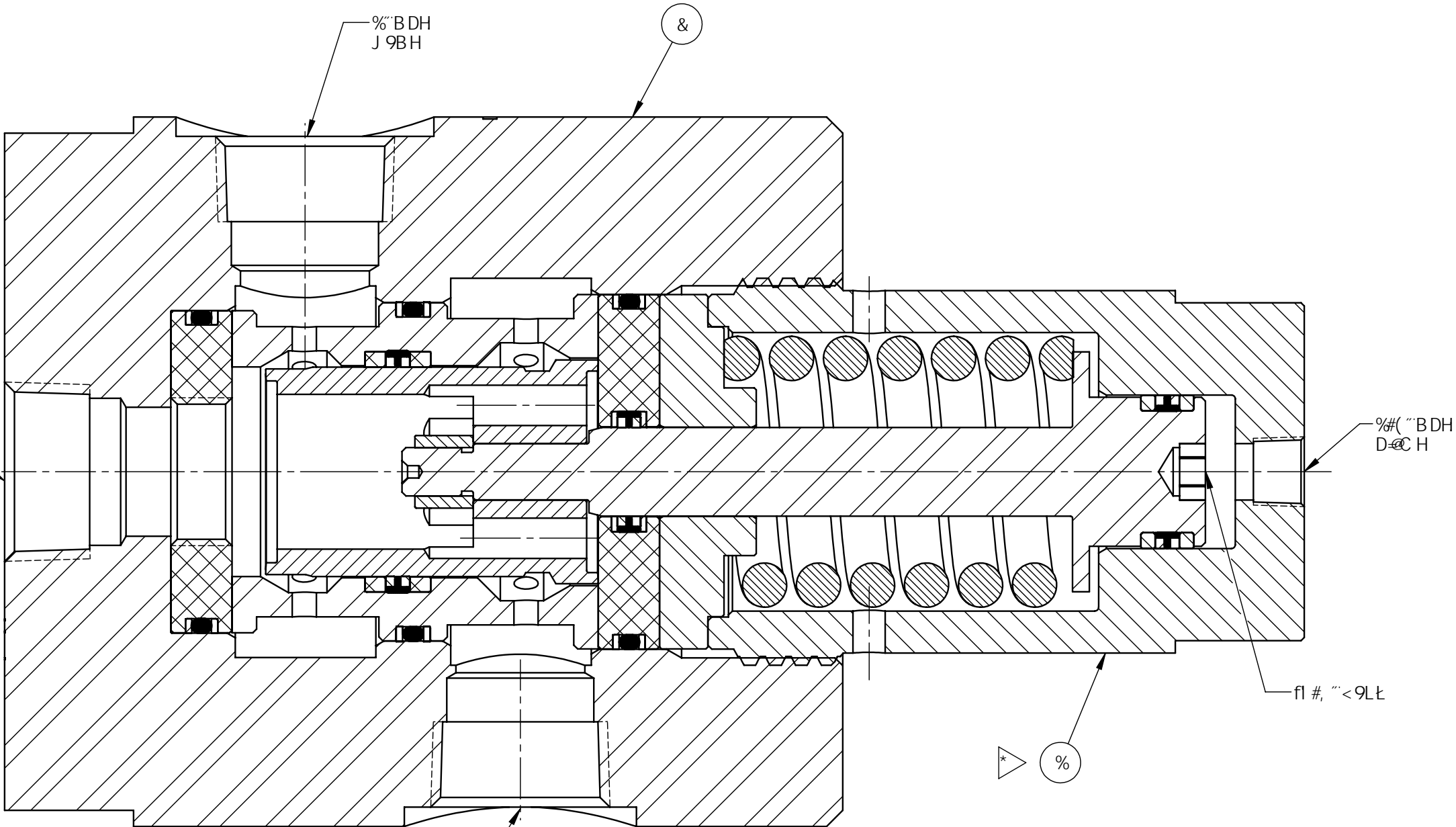
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6@C: A 5HF-5@					
#9A 'BC	D5FHB I A 69F	8 9G7 F-DHC B	A 5HF-5@		F? G?
%	&- %\$	J 5@ 9z 7 5FH-B; 9z GDA z; 9B &z%z B"C "C F B"7 "z) z\$\$\$ DG-G DD@M%#(" BDH 'D@C HDC FH	F9: 9F 'HC 'B 8J 'D5FHG	%	L L
&	&+ ' -)!&	6@ 7 ? zJ 5 @ 9z GDA z B"7 "z% "BDH z *\$\$\$ DG=	&+ ' -)	%	

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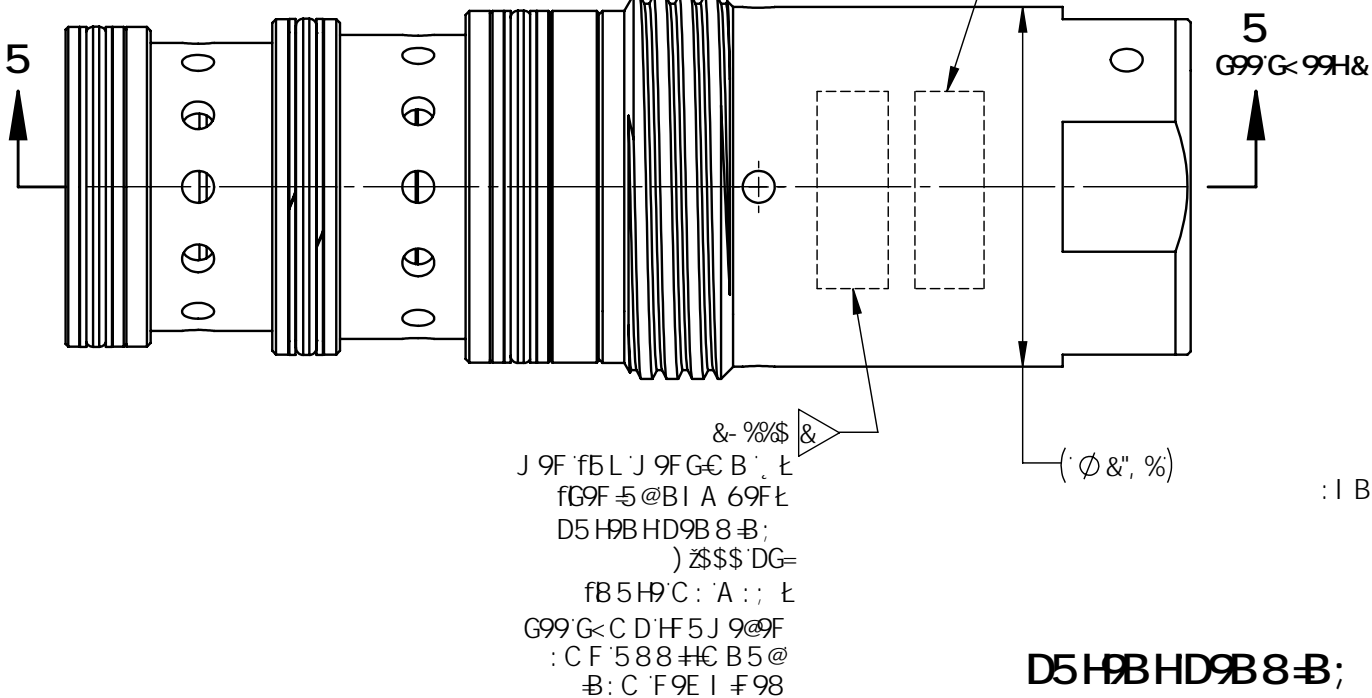
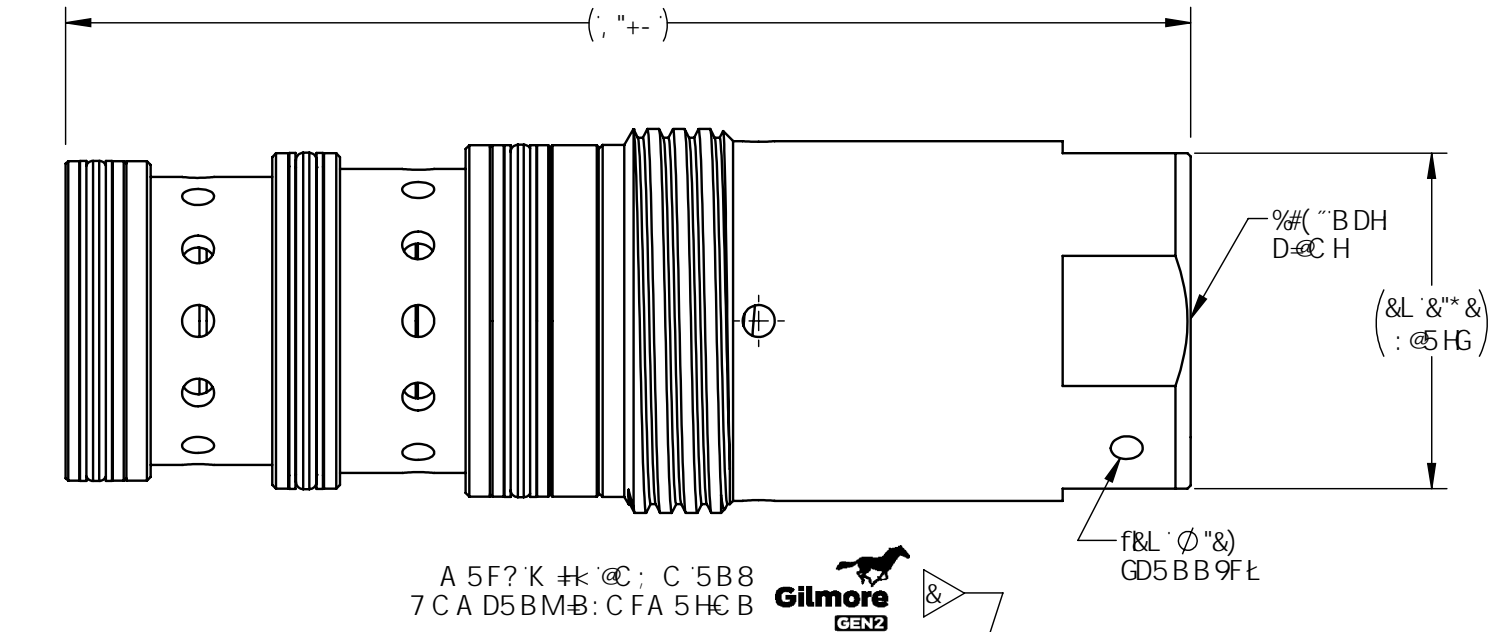
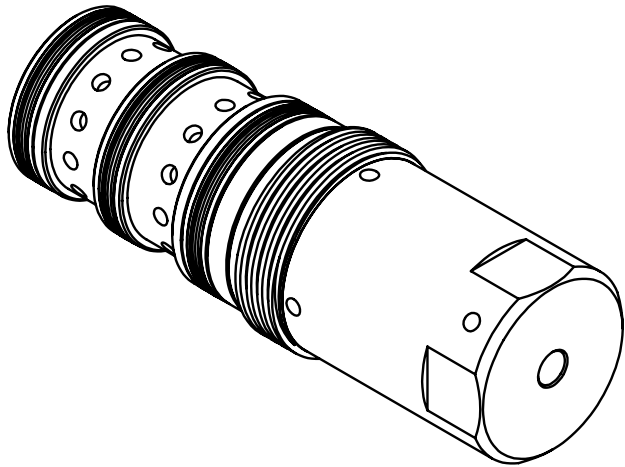
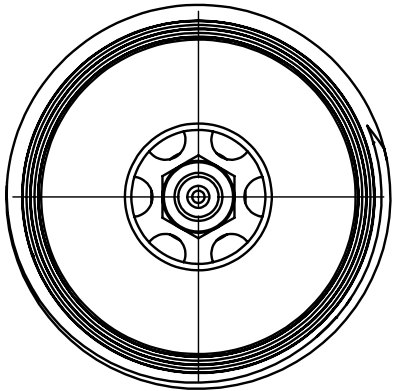
G7 5@

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Gc`XK cf_g

G<99H & C: &

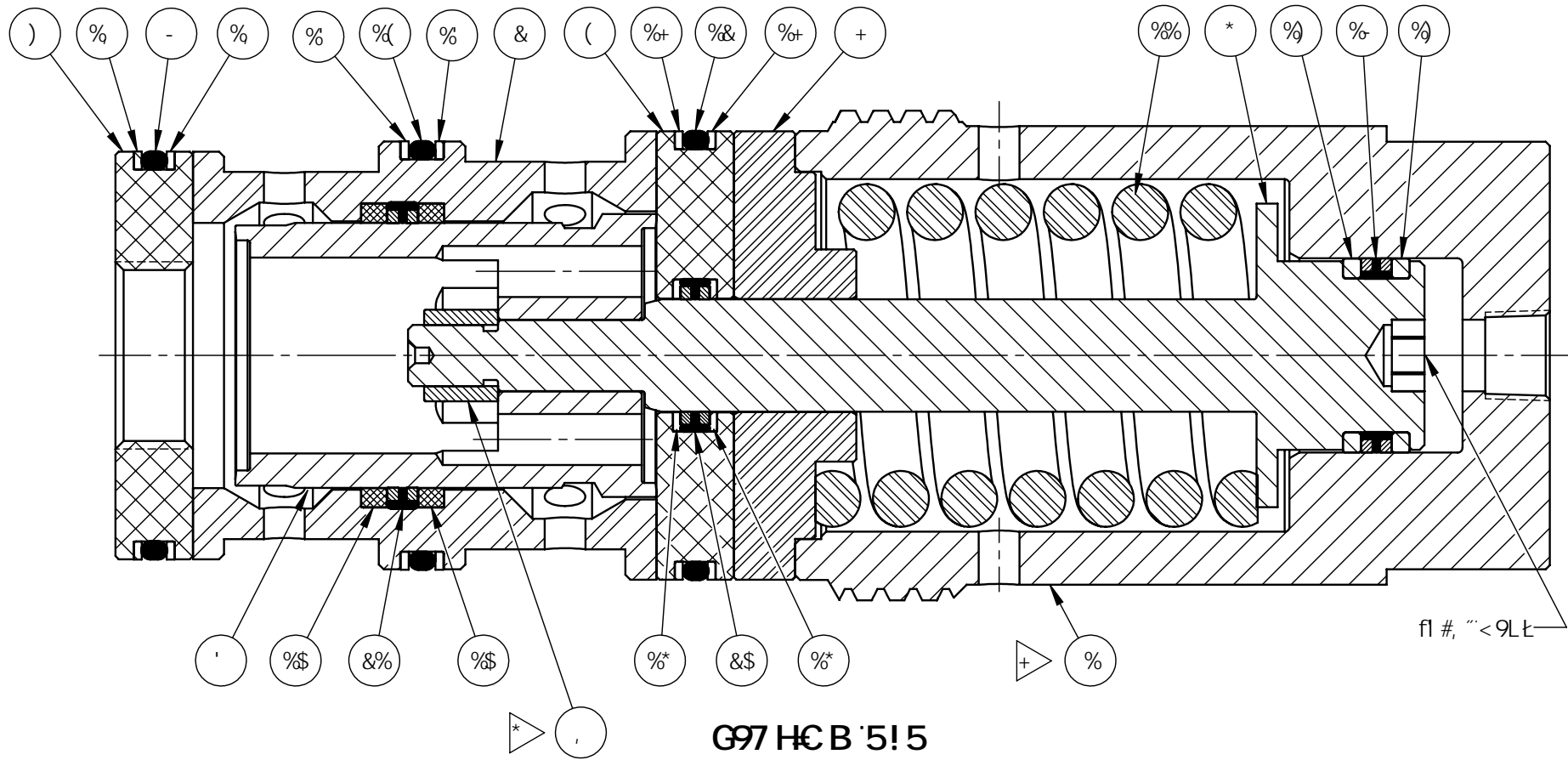
BC H9G
%> A 5F? 7 C A DC B9BHK #k 5GG9A 6@MK "C "BI A 69F 5GG<C I @8 C B
7 C A DC B9BH8F5K B;
&> A 5F? B; . A 5F? 5GG<CK B I GB; @5G9F 9H7 <CF 7 C A DI H9F
7 C B HFC @98 8C HD99B A 5F? B; A 57 <B 9Z "\$* "<÷ <A B 7 <5F57 H9FG"
" " : C F 6C HC A G95 @F9A C J 5 @I G9HC C @5H@%\$%\$!\$%\$&"
(" Lž-B 7 C @ A B 8 9D=7 HG D5 F HG-B G95 @? H I&- %/\$ G?"
)" Lž-B 7 C @ A B 8 9D=7 HG D5 F HG-B F9D5 F ? H I&- %/\$ F?"
*> HC FE I 9HC "&) : H @6G"
+> HC FE I 9HC " \$\$: H @6G-B 6@ 7 ? I GB; GD97 5 @
HC C @5H@%\$%\$%\$"
> 5 @A 5BI : 57 H F98 #9A G5F9 D5GGJ 5H98"
-> 5GG9A 6@MDFC 7 98I F9.) \$&, &
G5B85F8 : 5HDFC 7 98I F9.) \$&, '
9LH9B898 : 5HDFC 7 98I F9.) \$&, (
G9FJ 7 9A 5BI 5@) %\$&*



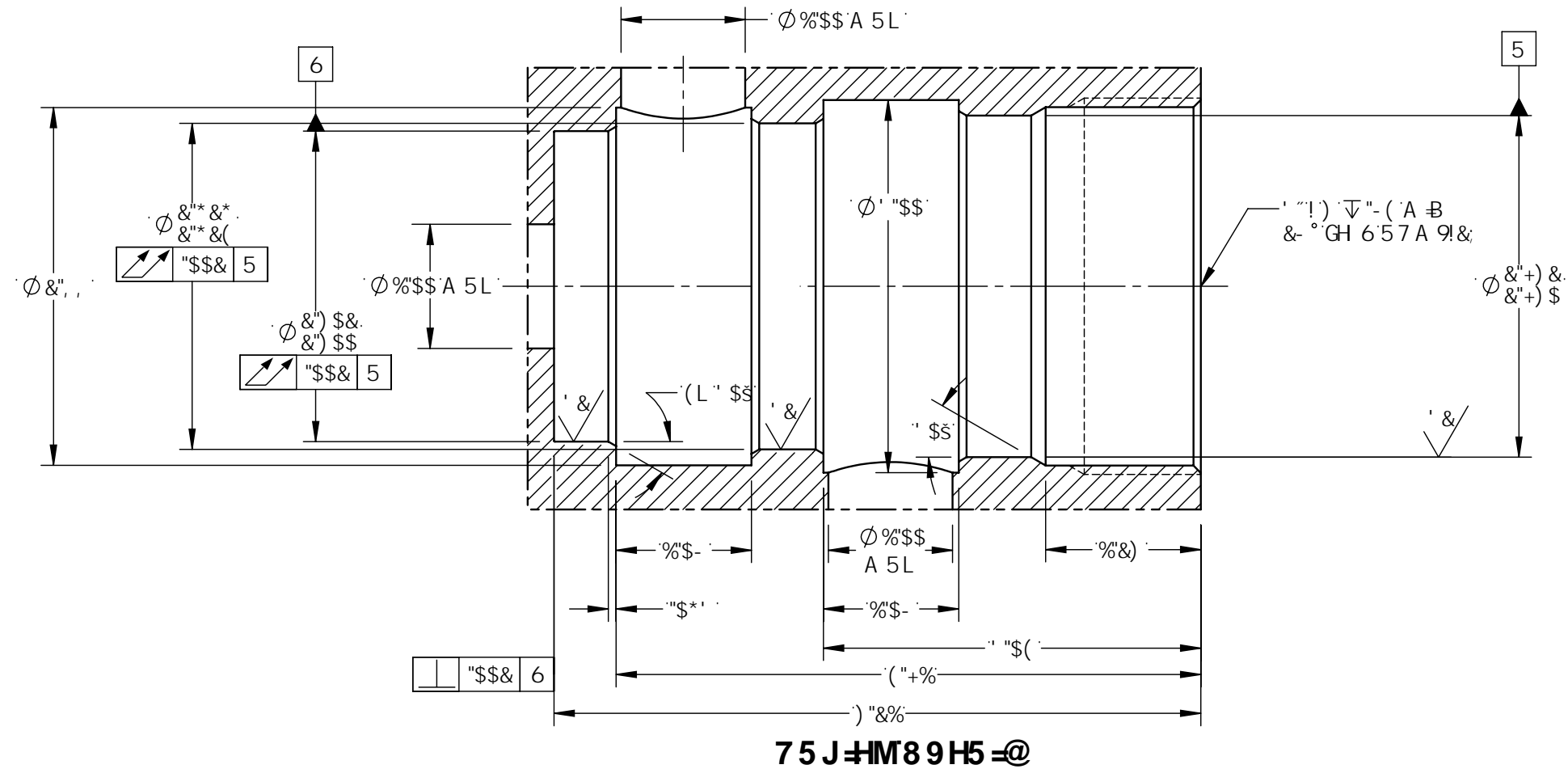
DF9GGI F985H5
GI DD@MA 5K D.) \$\$\$DG=
D@ HA 5K D.) \$\$\$DG=
5H) \$\$\$DG=GI DD@MF97 C A A 9B898
A B A I A D@ HDF9GGI F9. " \$\$\$DG=
5H' \$\$\$DG=GI DD@MF97 C A A 9B898
A B A I A D@ HDF9GGI F9. & \$\$\$DG=
: @K 85H5
7j 1;
A 5L A I A : @K 75D57 +M "%+) : DA
: @ 8G "%LK 5H9F 65G98 8F @B;
..... 7 C B HFC @: @ 8"
..... &L A B9F5@C @65G98 8F @B;
..... 7 C B HFC @: @ 8"
: 9B9F5@85H5
H9A D9F5H F9F5B; 9. " &: HC %/\$ \$:
5DDFC L K 9÷ <H %/\$ @G
: 9@ G9FJ 7 956@

A 5H9F 5@ F9: 9F HC B8J D5FHG		8A 9BGC BG5B8 HC @F5B7 9G5F9 B B7 <9GD9F 5GA 9M(") A 1% - (" I B @GGC H: 9FK @9 GD97 ÷ 98. %HC @F5B7 9G "L: ±"% "LL: ±"\$% "LLL: ±"\$%) 5B: @G ±") * &G F: 57 9H9LH F9. ** ✓		5DDFC J 5@ 8F5K B 6M JOP 85H9 4/13/20 7 <97?98 6M Cmcj 85H9 4-13-20 9B: B99F 85H9 4/13/20 9FB BIA 69F 85H9 \$&, % \$%#&, #&\$		Gilmore 9B; B99F-B; a pro/ery company	
7CB8 #HB.		't 7CF58-5@: 95H F9GG<5 @69 © K #k-B "\$%\$ (t 6F95? G<5FD 98; 9G"\$%\$)t B9F5B5@F58=G<5 @69 "\$%\$ A 5L *t 8F @DC B HGC DHC B5@K <9B G<CK B I BGD97 ÷ 98z5 @8F @DC BH5B; @G G<5 @69 69HK 99B - \$ "1% \$*		Hk9B: CFA 5HC B 7CBH5-B98 B Hk-68F5K B: 6Hk9 GC @DFC D9F HMC: : A CF9J 5@ 97C I B @GGC H: 9FK @9 G5H98" 5BMF9DFC 8I 7HC B B D5FHC F K <C @K #k C I H Hk9K F H9B D9FA GGC B C: : A CF9J 5@ 97C GDFC <6H98"		J 5@ 9Z 75FH-B; 9Z GDA Ž; 9B &Ž %ZB"C "CF B"7"Ž) \$\$\$DG=GI DD@M %#("BDH D@C HDC FH	
HF95HA 9BH		G7 <9A 5H7 B"C"		G7 <9A 5H7 B"7"		G7 5@ % (Gc JK cf_g G<99H % C: &	
DFC 798I F9BI A 69F.		6		5			

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6-@C: A 5H9F-5@						
#9A BC	D5FH BI A 69F	8 9G7 F 4HC B	A 5H9F-5@	E HM	F?	G?
%	% ' * \$(GDF-B; ' < C I G-B;	5 &+ (' HD' G&% \$ \$ fB +FC B-7 ' * \$L	%		
&	% ') - ,	GD5 7 9F Z J 5 @ 9Z GDA Z % ' Z ; 9B &	5 &+ * ' HD' G&% \$ \$ fB +FC B-7 ' * \$L	%		
'	% ') - -	G95 @G@99J 9	5 &+ * ' HD' G&% \$ \$ fB +FC B-7 ' * \$L	%	L	
(	% ' * \$ \$	G95 HZ HC DZ J 5 @ 9Z GDA Z % ' Z ; 9B &	8 9@F-B) %&D	%	L	L
)	% ' * \$ %	G95 HZ 6C HC A	8 9@F-B) %&D	%	L	L
*	% ' * \$ &	D-4HC B ' FC 8 Z G< C I @ 9F 98	5 &+ * ' G&\$- % \$ fB +FC B-7) \$L	%		
+	% ' * \$ '	6I G<-B; Z J 5 @ 9Z GDA Z % ' Z ; 9B &	5 G+A ' 6% - ' 7 * % (\$ \$ fB @ A -B I A ' 6FC B N9L	%		
,	&%&&! \$ \$)	< 9L @C 7 ? ' BI HZ B M@C B	:) - (' 5 @C M; F ' & Z B M@C B fl %* GGL	%	L	L
-	% % \$! % \$ % 2 %	C ! F-B;	< B 6F	%	L	L
% \$	&+ % %	K 95F ' 65B8	8 9@F-B ' 5;	&	L	L
% %	&+ % +	GDF-B; ' 7 C A DF 9GG@C B	' 5' % ' HD' %*	%		
% &	% % \$! % & (? %	C ! F-B;	< B 6F	%	L	L
%	&\$- &+ %	F-B; Z 65 7 ? I D	D99?	&	L	L
% (% % \$! % & & 2 %	C ! F-B;	< B 6F	%	L	L
%)	% ' * \$)	K 95F ' 65B8	8 9@F-B ' 5;	&	L	L
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%	% % \$, ! \$ % (HG95 @D-4HC B	7 5 F6C LM 5 H98 B +F @ # BM 5 HFC B	%	L	L
& \$	% % \$, !) \$ -	HG95 @FC 8	7 5 F6C LM 5 H98 B +F @ # BM 5 HFC B	%	L	L
& %	& \$ +) ' ,	HG95 @G@99J 9	7 5 F6C LM 5 H98 B +F @ # BM 5 HFC B	%	L	L

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9B; B99F-B;

G49	8K; 'BC	F9J
6	&- %/\$	5
G7 5 @	% (Gc JXK cf_g
G< 99H & C: &		

6

BC H9G

A 5F?B; .A 5F?7CA DCB9BHK #k 5GG9A 6@MK "C "

5GG<CK B'CB'Hk97CA DCB9BH8F5K -B;

A 5F?B; .A 5F?5GG<CK B'I GB; .@G9F'9H7 <'CF'7CA DI H9F'

7CBHFC @98'8CHD99B'A 5F?B; A 57<-B9Z"\$* <÷ <

A -B'7<5F57H9FG"

" : CF'6CHCA 'G95@F9A CJ 5@I G9'HC C @5H@%\$%\$!\$&"

(" Lž-B'7C @ A B'89D7HG'D5FHG-B 'G95@?H&- %\$G?"

)" Lž-B'7C @ A B'89D7HG'D5FHG-B 'F9D5F ?H&- %\$F?"

*HC FEI 9775FH-F; 9'HC " \$\$: H@G-B'A 5B÷C @6@7?

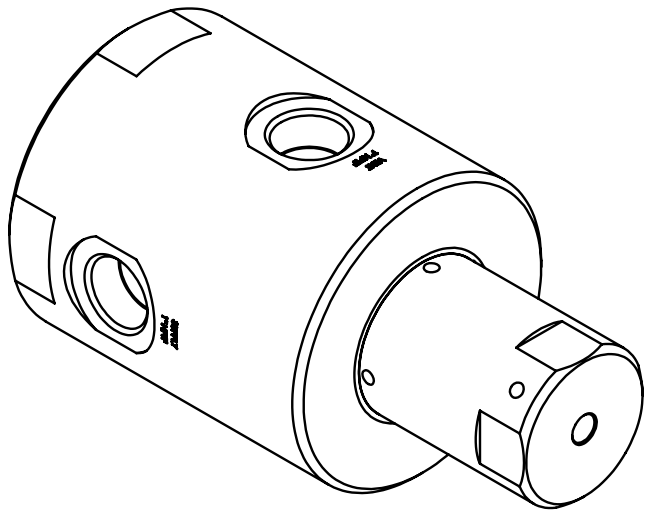
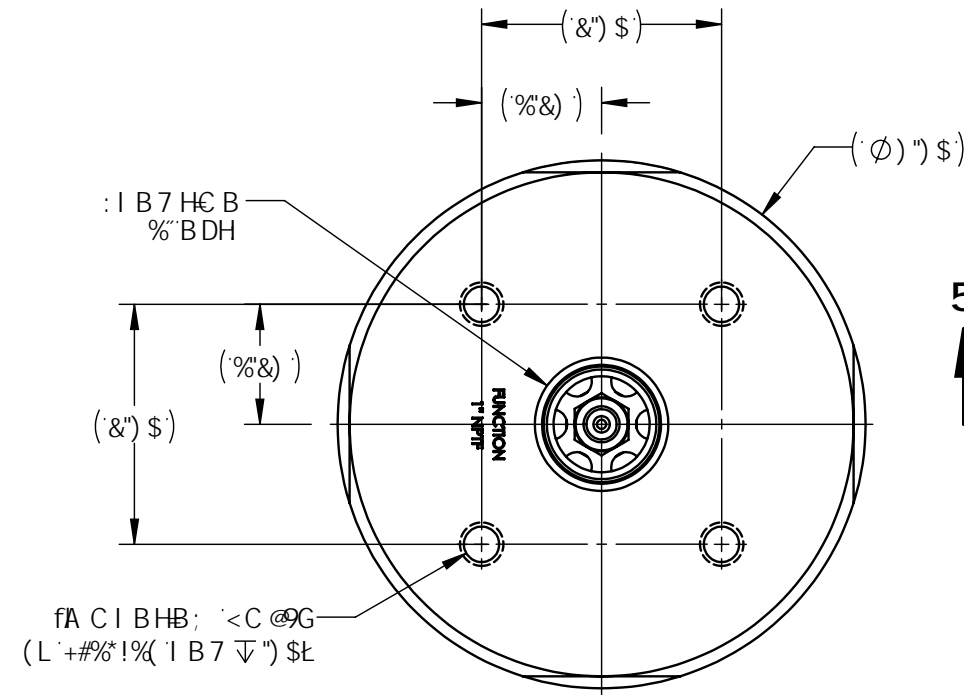
I GB; 'GD97-5@HC C @5H@%\$%\$%

+5GG9A 6@MDFC 798I F9.....) \$& &

G5B85F8': 5HDFC 798I F9.....) \$& &

9LH9B898': 5HDFC 798I F9.....) \$& &

G9FJ 79'A 5BI 5@.....) %\$&*



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&- %88% &

J 9F'f5L'J 9FGC B' L

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G5A 9'G#B'5G'75FH-F; 9'L

D5H9BHD9B8-B;

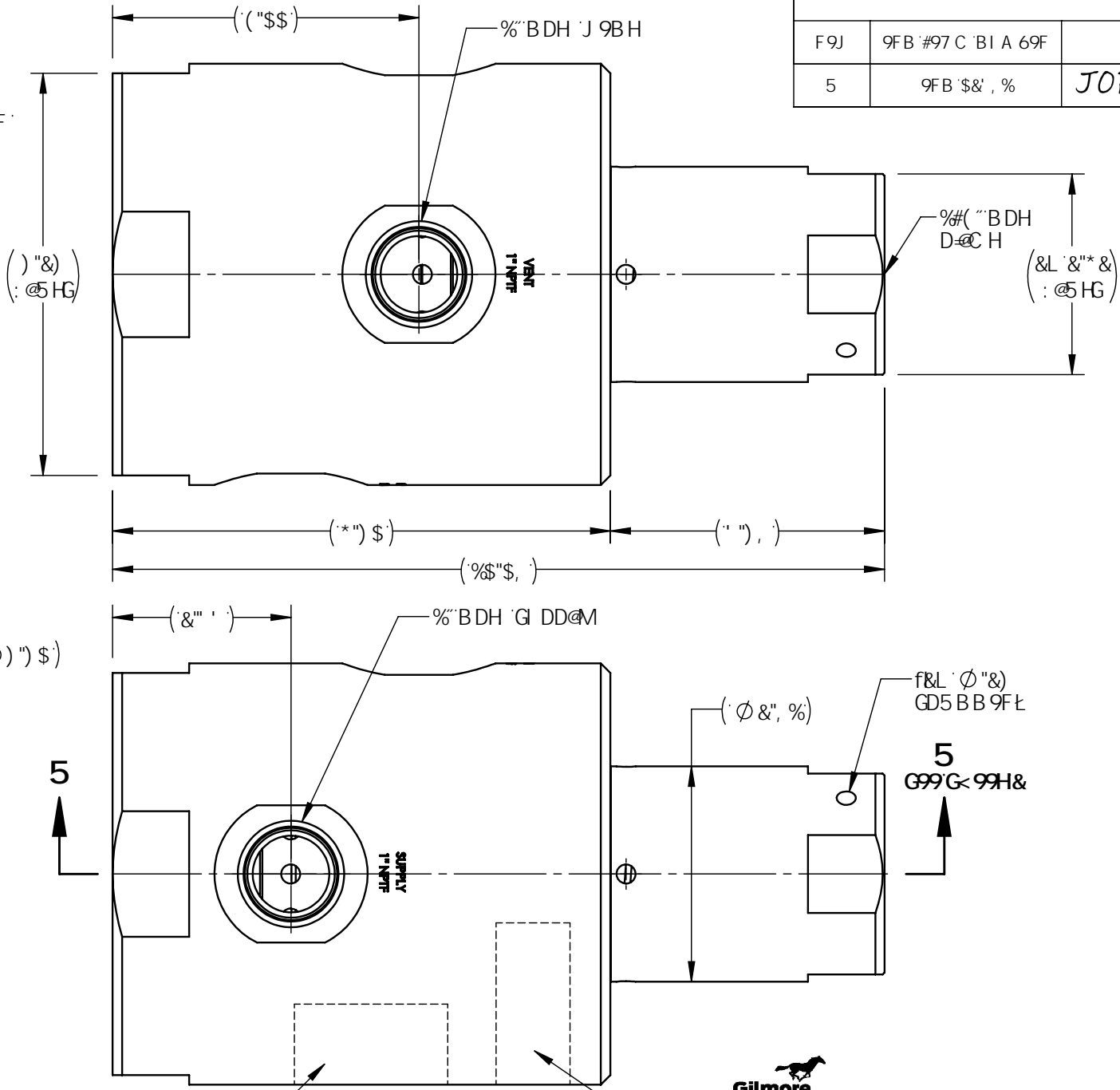
) \$\$\$DG=

fB5H9'C: 'A: ; L

G99'G<C D'HF5J 9@F

: CF'588+HC B5@


-B: C'F9E I F98



A 5F?K #k @C; C'5B8

7CA D5BMB: CFA 5HC B

D5H9BHD9B8-B;

A 5H9F-5@ G99D5FHG'CB-B8÷'6CA		8A 9BGC BG5B8'HC @F5B79G5F9 B-B7<9GD9F'5GA 9M(") A I%- (" I B@GGC Hk 9FK -G9 GD97 ÷ 98. %HC @F5B79G "L: ±%" "LL: ±\$%" "LLL: ±\$\$" 5B; @G ±") *		5DDFCJ 5@ 8F5K B 6M JOP 4/13/20		 Gilmore a pro/srv company		9B; -B99F-B;			
7CB8+HC B.				7<97?98'6M Cmcf 4-13-20		J 5@ 9Z%žGDA ž; 9B'&žB'C'ž %BDH'6@7?'DC FHG'ž#("' BDH'D@C HDC FH					
				9B; -B99F AQP 4/13/20							
HF95HA 9BH		&L G F: 579H9LH F9. ✓		9FB'BI A 69F \$&' % \$%#&- #&\$							
DFC 798I F9BI A 69F.		* L 7CF58-5@: 95H F9GG<5 @69 © K #k-B "\$%\$ (L 6F95? G<5FD 98; 9G"\$%\$) L BH9FB5@F58=G<5 @69"\$%\$ "A 5L *L 8F @DC BHGC DHC B5@K <9B G<CK B I BGD97 ÷ 98Z5 @8F @DC BH5B; @G G<5 @69 69HK 99B -S"1%\$*		Hk9-B: CFA 5HC B 7CBH-B98-B Hk-68F5K-B; -G Hk9 GC @DFC D9FHMC: ; A CF9J 5@ 97C I B @GGC Hk9FK -G9 G5H98" 5BMF9DFC 8I 7HC B-B D5FHCFK <C @K #k C I H Hk9K F#H9B D9FA GGC B C: ; A CF9J 5@ 97C -GDFC <6+H8"		GAP 6		8K; 'BC &- %&% 5			
						G7 5@ % (Gc JXK cf_g		G<99H % C: &	

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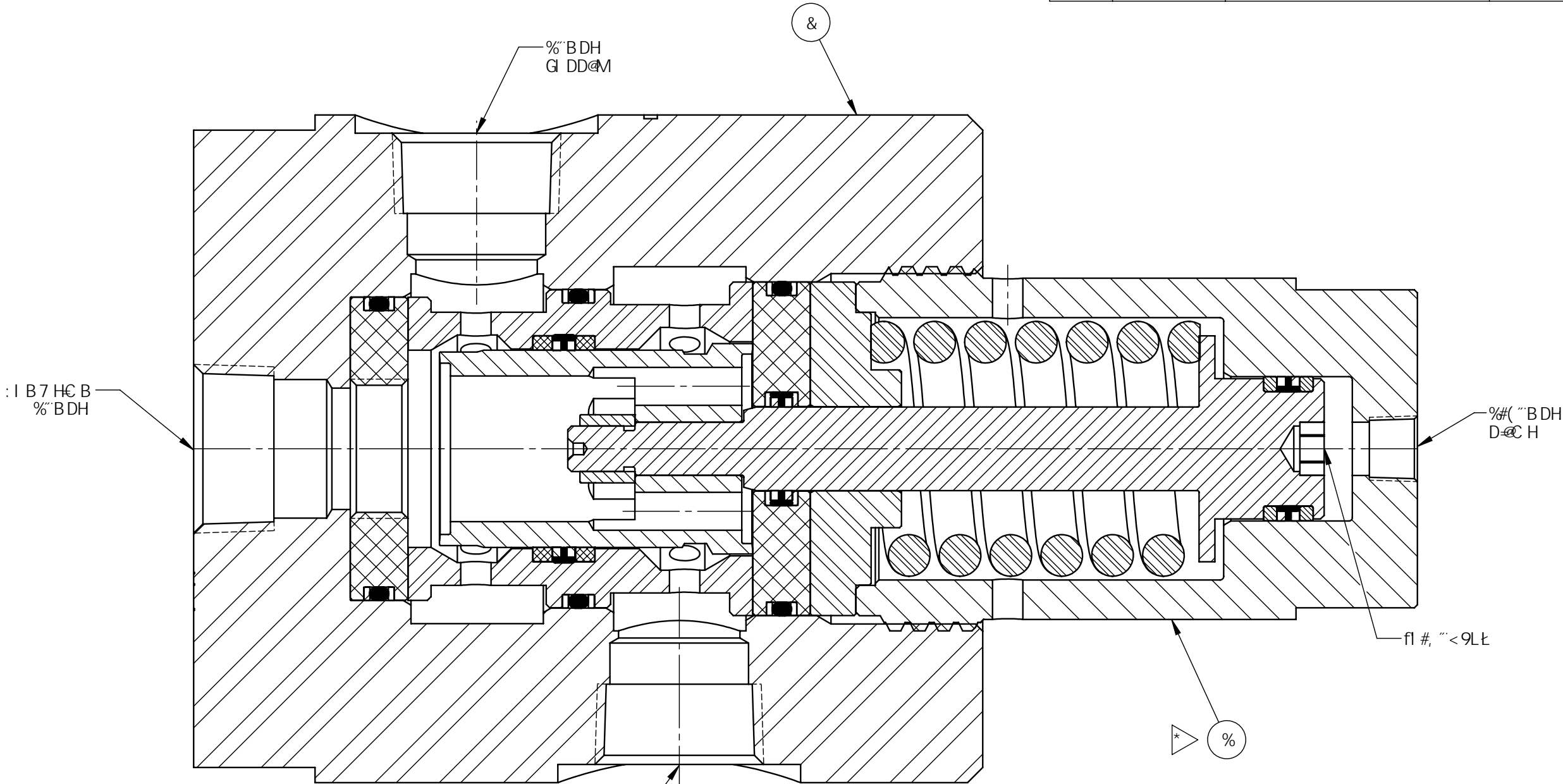
&

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6@@C: 'A 5H#F-5@						
#9A BC	D5FHB I A 69F	8 9G7 F-DHC B	A 5H#F-5@	E HM	F?	G?
%	&- %8/\$	J 5@ 9ž7 5FF-B; 9žGDA ž: 9B '8ž%ž B"C "C F B"7 "ž) ž\$\$\$\$DG=G DD@M%#(" BDH 'D-@C HDC FH	F 9: 9F 'HC 'B 8J 'D5FHG	%	L	L
&	&+' -)!%	6@C 7?žJ 5@ 9žGDA žB"C "ž%"BDH ž *\$\$\$\$DG=	5&+* 'HD' %*	%		

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G97 HC B '5!5

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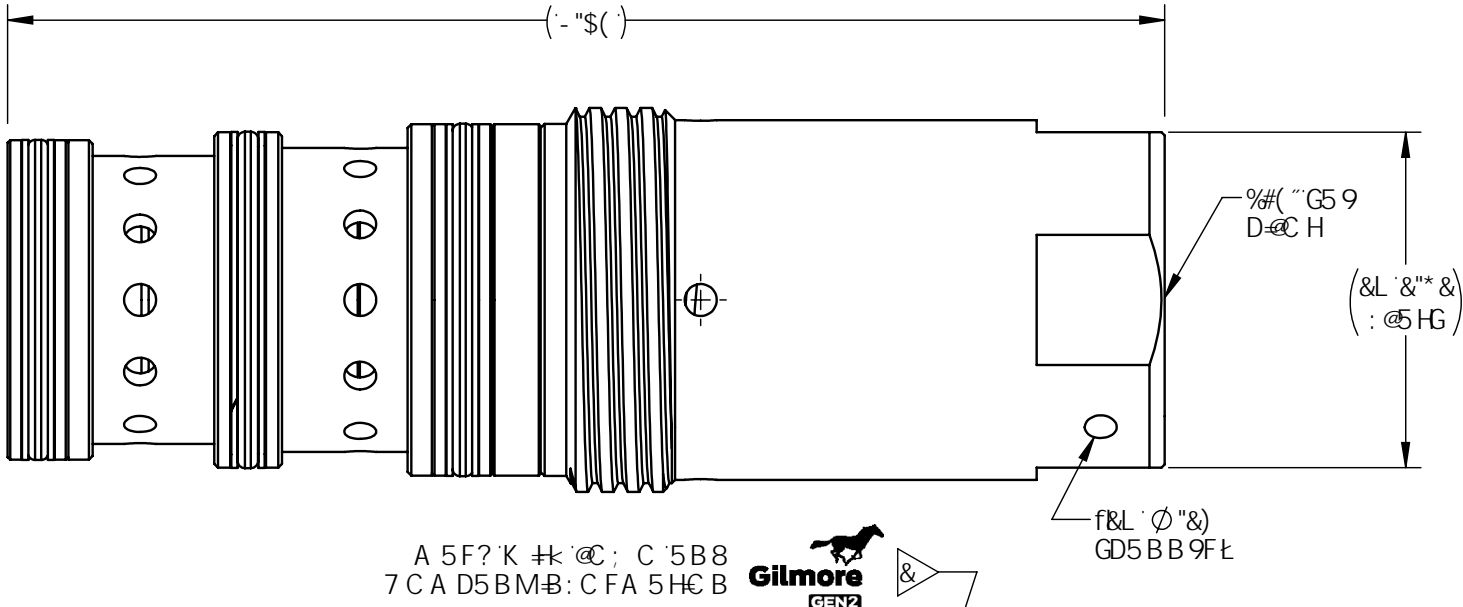
9B; B99F-B;

G#9	8K ; BC	F9J
6	&- %8%	5
G7 5@	%(Gc`XK cf_g
G<99H & C: &		

BC H9G
% A 5F? 7 C A DC B9BHK #k 5GG9A 6@MK "C "BI A 69F 5GG<C I @8 C B
7 C A DC B9BH8F5K B;
& A 5F? B; "A 5F? 5GG<CK B I GB; @5G9F 9H7 < C F 7 C A DI H9F
7 C B HFC @98 8C HD99B A 5F? B; A 57 < B 9Z "\$* "< < A B 7 < 5F57 H9FG"
' " : C F 6C H C A G95 @F9A C J 5 @I G9 H C C @5H@%\$%\$!\$%\$&"
(" LžB 7 C @ A B 89D=7 HG D5 F HG B G95 @? H I&- %&& G?"
)" LžB 7 C @ A B 89D=7 HG D5 F HG B F9D5 F ? H I&- %&& F?"
* HC FE I 9 HC "&) : H @6G"
+ HC FE I 9 HC " \$ \$: H @6G B 6 @ 7 ? I GB; GD97 5 @
HC C @5H@%\$%\$%\$%\$"
5 @A 5BI : 57 H F98 #9A G5F9 D5GGJ 5H98"
5GG9A 6@MDFC 798I F9.) \$&, &
G5B85F8 : 5HDFC 798I F9.) \$&, '
9LH9B898 : 5HDFC 798I F9.) \$&, (
G9FJ 7 9 A 5BI 5 @) %\$&*

F9J GGBG				
F9J	9FB #97 C BI A 69F	8F5K B	7 < 97 ? 98	5DDFC J 98
5	9FB '\$&' , %	JOP 4/13/20	CMCf 4-13-20	AQP 4/13/20

DF9GGI F985H5
GI DD@MA 5K D.) \$\$\$'DG=
D@ HA 5K D.) \$\$\$'DG=
5H) \$\$\$'DG=GI DD@MF97 C A A 9B898
A B A I A D@ HDF9GGI F9.) \$\$\$'DG=
5H' \$\$\$'DG=GI DD@MF97 C A A 9B898
A B A I A D@ HDF9GGI F9.) \$\$\$'DG=
: @K 85H5
7j 1;
A 5L A I A : @K 75D57 +M' %+) ; DA
: @ 8G '%L'K 5H9F 65G98 8F @B;
..... 7 C B HFC @: @ 8"
..... &L A B9F5 @C @65G98 8F @B;
..... 7 C B HFC @: @ 8"
: 9B9F5 @85H5
H9A D9F5H F9F5B; 9. " &: HC % \$ \$:
5DDFC L K 9+ < H % @G
: 9@ G9FJ 7 956@



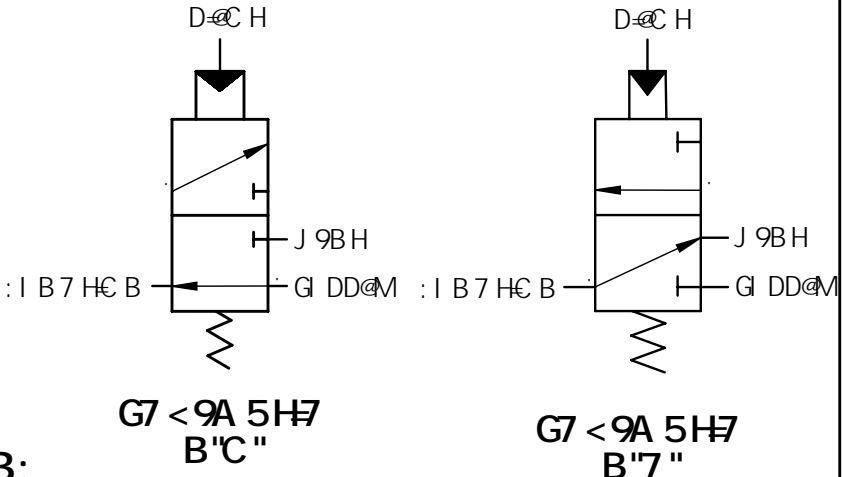
A 5F? K #k @C; C 5B8
7 C A D5BM B: C F A 5H C B



f&L 'φ"&)
GD5BB9F L

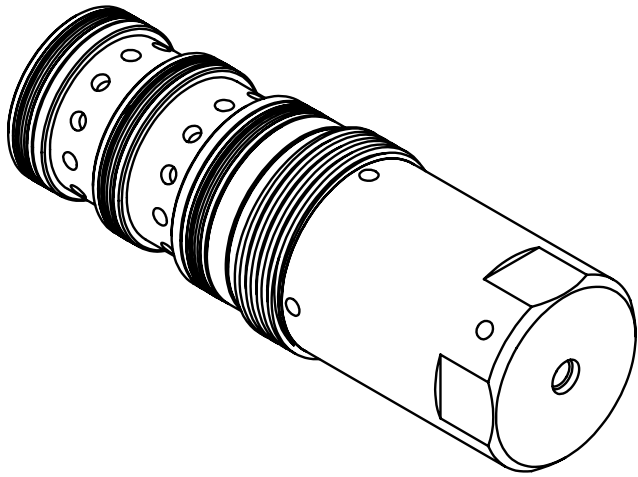
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G99G<99H&

&- %&& &
J 9F f5L J 9FG C B ' L
fG9F 5 @BI A 69F L
D5H9BHD9B8 B;
) \$\$\$'DG=
fB5H9C: A : ; L
G99G<C D H F5J 9@9F
: C F 588 #C B5 @
B: C F9E I F98

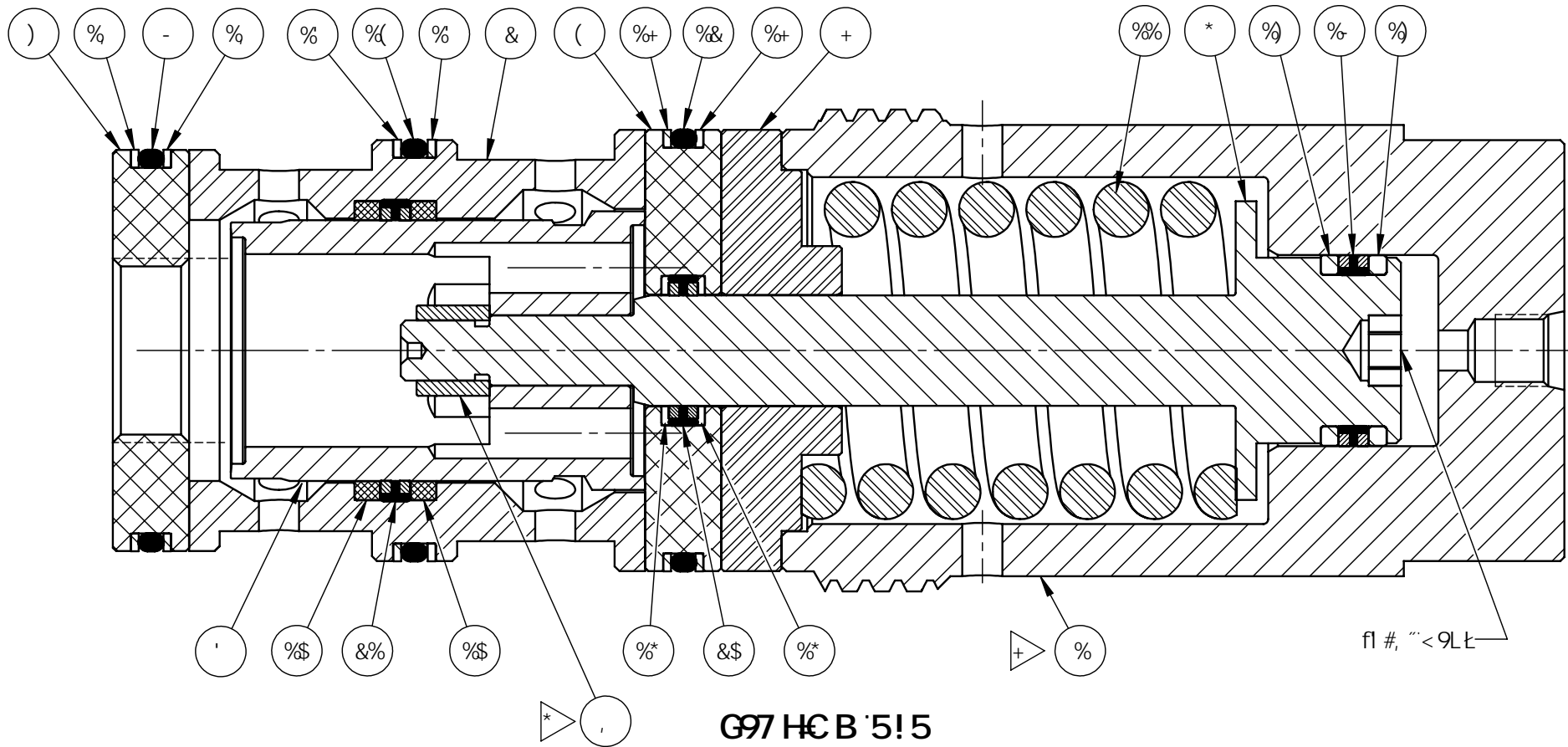


D5H9BHD9B8 B;

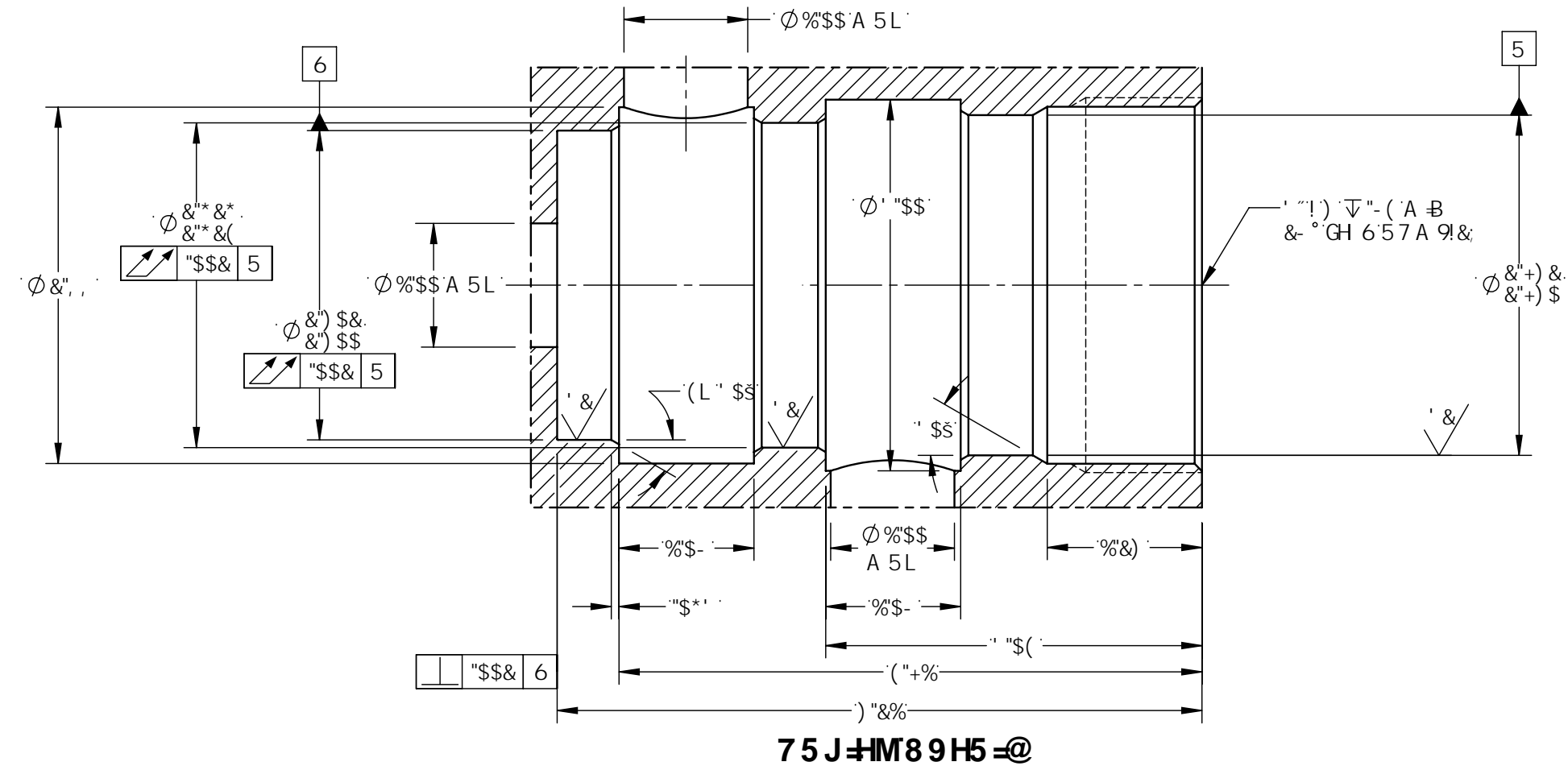
A 5H9F 5@ F9: 9F HC B8J D5FHG		8A 9BGC BG5B8 HC @F5B79G5F9 B B7 < 9GD9F 5GA 9M() A 1% - (" I B @GGC H: 9FK @9 GD97 = 98. %HC @F5B79G "L: ±"% "LL: ±"\$% "LLL: ±"\$%) 5B: @G ±") &L G F: 579H9LH F9. ** ✓		5DDFC J 5@ 8F5K B 6M JOP 85H9 4/13/20 7 < 97 ? 98 6M CMCf 85H9 4-13-20 9B: B 99F AQP 85H9 4/13/20 9FB BI A 69F \$&' , % \$(# \$, # & \$		Gilmore 9B; B 99F B; a pro/ery company	
7CB8 #C B.						J 5@ 9Z 75FH F 8; 9Z GDA Ž; 9B &Ž %Z B'C "C F B'7'Ž) \$\$\$'DG=GI DD@M %#("G5 9D@C HDC FH	
HF95HA 9BH						GAN 8K; BC	F9J
DFC 798I F9BI A 69F.						6	5
		H9B: CFA 5HC B 7CBH B98 B H 68F5K B: 6H9 GC @DFC D9F HMC: ; A CF9J 5@ 97C I B @GGC H 9FK @9 G5H98" 5BMF9DFC 8I 7HC B B D5FHC F K < C @K #C I H H 9K F H9B D9FA GGC B C: ; A CF9J 5@ 97C 6DFC < 6H98				G7 5@ % (Gc JXK cf_g G<99H % C: &	



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6 @ C : A 5 H F 5 @

#PA BC	D5FH BI A 69F	8 9G7 F DHC B	A 5H9F 5@	E HM	F?	G?
%	&\$- &(-	GDF B; ' < C I G B;	5 &+ ' HD' G&% \$ \$ fB #FC B 7 * \$ L	%		
&	% ') - ,	GD5 7 9F	5 &+ ' HD' G&% \$ \$ fB #FC B 7 * \$ L	%		
'	% ') - -	G95 @G@9J 9	5 &+ ' HD' G&% \$ \$ fB #FC B 7 * \$ L	%	L	
(	% ' * \$ \$	G95 HHC D	8 9@F B) %D	%	L	L
)	% ' * \$ %	G95 H 6C HC A	8 9@F B) %D	%	L	L
*	% ' * \$ &	D G C B F C 8 Z G < C I @ 9 F 98	5 &+ ' G&\$- % \$ fB #FC B 7) \$ L	%		
+	% ' * \$ '	6I G < B;	5 G A ' 6% - 7 * % (\$ \$ fB @ A - B I A ' 6FC B N L	%		
,	& % % & (\$ \$)	< 9 L @ C 7 ? ' B I H B M C B	:) - (' 5 @ C M: F ' & Z B M C B f l % ' G G L	%	L	L
-	% % \$ \$! % \$ % ? %	C ! F B;	< B 6 F	%	L	L
% \$	& + % %	K 95 F ' 65 B 8	8 9@F B ' 5:	&	L	L
% %	& + % +	GDF B; ' 7 C A DF 9 G G C B	5 ' % ' HD ' %	%		
% &	% % \$ \$! % % (? %	C ! F B;	< B 6 F	%	L	L
%	&\$- &+ %	F B; Z 65 7 ? I D	D99?	&	L	L
% (	% % \$ \$ ! % % ? %	C ! F B;	< B 6 F	%	L	L
%)	% ' * \$)	K 95 F ' 65 B 8	8 9@F B ' 5:	&	L	L
% *	% ' * \$ *	65 7 ? I D F B;	D99?	&	L	L
% +	% ' * \$ +	65 7 ? I D F B;	D99?	&	L	L
%	% ' * \$,	65 7 ? I D F B;	D99?	&	L	L
%	% % \$, ! \$ % (HG95 @ D G C B	7 5 F 6 C L M 5 H 98 B # F @ # B M 5 H F C B	%	L	L
& \$	% % \$, !) \$ -	HG95 @ F C 8	7 5 F 6 C L M 5 H 98 B # F @ # B M 5 H F C B	%	L	L
& %	& \$ +) ' ,	HG95 @ G @ 9 J 9	7 5 F 6 C L M 5 H 98 B # F @ # B M 5 H F C B	%	L	L

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9B; B99F B;

GAP

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8K ; BC

G7 5 @

% (

Gc JK cf_g

G< 99H & C: &

F9J

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BC H9G.

A 5F?B; A 5F?7CA DCB9BHK #k 5GG9A 6@MK "C"
 5GG<CK B'CB'k97CA DCB9BH8F5K B;
 A 5F?B; A 5F?5GG<CK B'IGB; @5G9F 9H7<CF
 7CA DI HF 7CBHFC @98 8CHD99B A 5F?B; A 57<B 9Z
 "\$*`<÷ <A B'7<5F57H9FG"

& H9GHDFC 7 98I F9.....) \$\$, +
 5GG9A 64MDFC 7 98I F9.....) \$&, &
 G9FJ 7 9A 5BI 5@.....) %\$&*

HC FE I 9 GDA BHC 6@ 7? K #k '5H@%\$%%5H' '\$\$: H@6"

► A I GH69'GH5A D98 'DF € F 'HC '5 GG9A 6@M

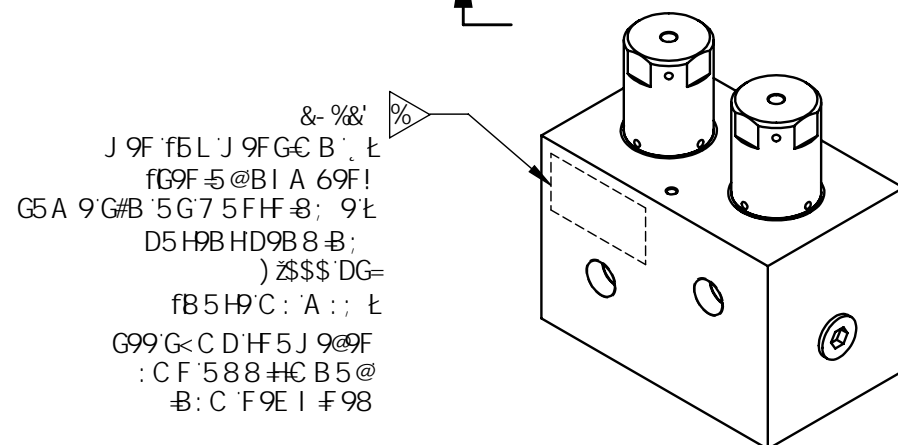
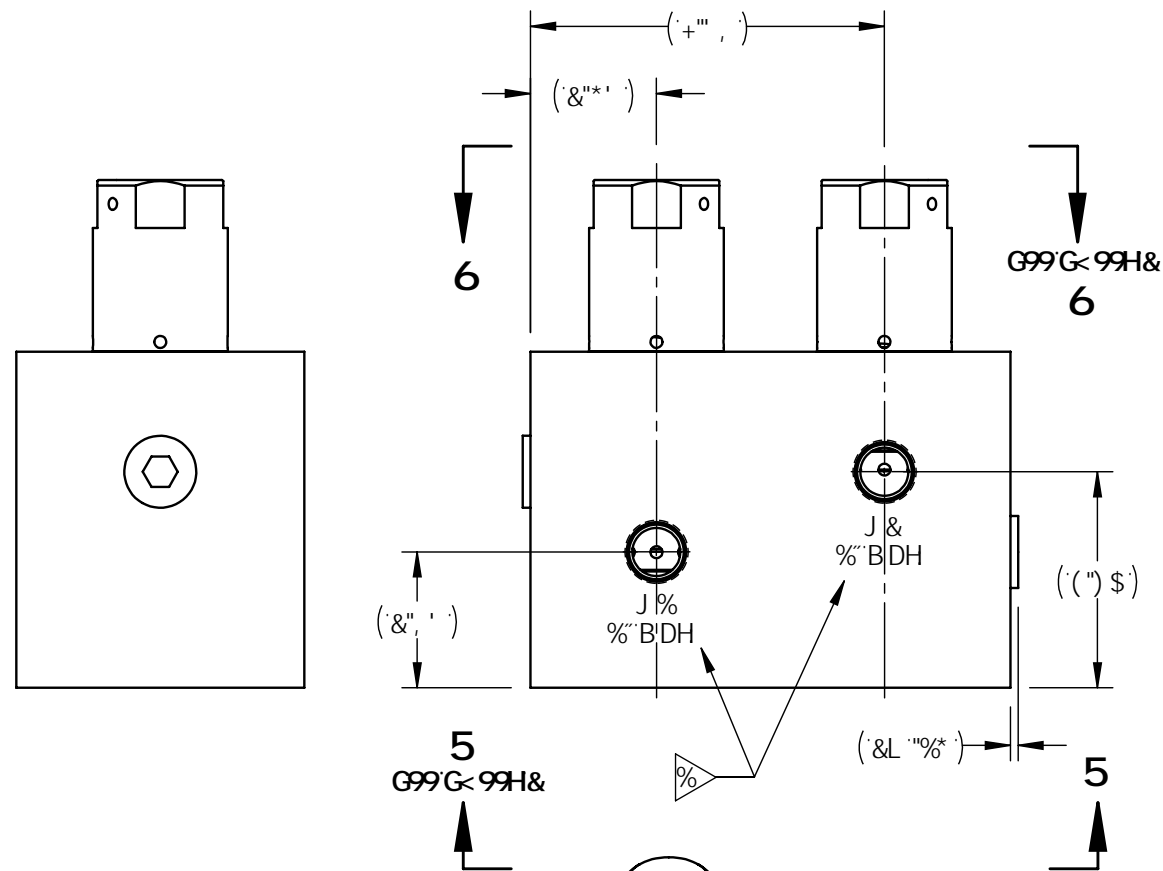
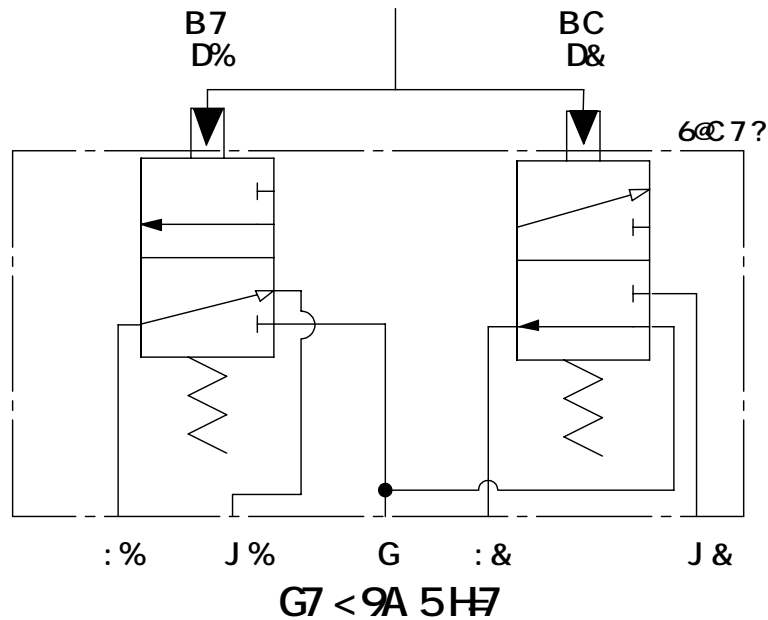
▷ I G9'G! 6'5 GG9A 6@MF 9D5 ≠ '?' ≠I'

* I G9'GI 6'5 GG9A 6@MG95 @? ≠I'

+ " : C F ' 6 C H C A ' G 9 5 @ F 9 A C J 5 @ I G 9 H C C @ 5 H @ % \$ \$ % \$! . \$ \$ & "

, " Lž-B'7C@AB'89D=7HG'D5FHG-B'G95@?#H&- %/%\$'G?"

- " LžB '7 C @ A B '8 9D7 HG'D5 FHG'B 'F 9D5 F '? #H&- %\$'F?"



&- %&
J 9F 'f5L 'J 9FGC B' ; 1
fG9F 5@B1 A 69F!
G5A 9'G#B '5G75FH 8; 91
D5H9BHD9B8 8;
) \$\$\$'DG=
fB5H'C : 'A : ; 1
G99G<C D'H5J 9@9F
: CF '588 #C B5@
8: C 'F9E I 1 98

A 5H9F 5@ F9: 9F HC B8J 6C A +PA G	18A 9BG€ BG5B8 HC 9F5B7 9G5F9 B B7 <9GD9F 5GA 9M(“) A 1%- (" I B @GGCHK 9FK 69GD97 ≠ 98. %LC 9F5B7 9G "L ± % "LL ± \$ % "LLL ± \$ \$) 5B: @G ± ") *	5DDFCJ 5@ 8F5K B 6M JOP 85H9 4/20/20 7 <9? 798 6M CMcf 85H9 4-20-20 9B; B99F AGP 85H9 4/20/20 9FB BI A 69F \$&' , % \$(# \$, # & \$	Gilmore a private company	9B; B99F B;
7CB8#€B.	'E 7CF58 5@: 95H F9G<5 @69 ◎ K #k-B "\$%\$ (E 6F95? G<5FD98; 9G"\$%\$ LE BHFB5 @F58=G<5 @69 "\$%\$ 'A 5L *E 8F @DC BHG DHC B5@< 9'B G<CK B I BD97 ≠ 98Z5 @BF @DC BH5B; @G G<5 @69 69K 99B -S "% \$*	H<9B: CFA 5HC B 7CBH5 B98 B H<68F5K B; GH<9 GC @DFC D9FHMC :; A CF9J 5@ 97C I B @GGCHK 9FK 69 GH5H8" 5BMF9D9C 8I 7HC B B D5FHCF C<@ K KCI H H<9K FHBR D9FA GGB C ; A CF9J 5@ 97C G DFC <4H8*	GDA ŽA J 5Ž; 9B '&ž(!K 5M"%ž%#("' BDH 'D=CH%" BDH '6@ 7 ? DC FHG	
IF95HA 9BH		\$&' , % \$(# \$, # & \$	G99 8K; BC	F9J
DFC 798I F9BI A 69F.	>		6	&- %&' 5
			G75 @ % (	Gc`XK cf q G<99H % C: '

DF 9GGI F 9'85 H5

G DD@MA 5K D.) \$\$\$ DG=
D@C HA 5K D.) \$\$\$ DG=

5H) \$\$\$D\$G=GD\$D\$M\$F\$97C\$A\$A\$9B\$898
A\$B\$A\$A\$D\$C\$HDF\$9GG\$F\$9: ' \$\$\$D\$G=
5H' \$\$\$D\$G=GD\$M\$F\$97C\$A\$A\$9B\$898
A\$B\$A\$A\$D\$C\$HDF\$9GG\$F\$9: & \$\$\$D\$G=

:@CK'85H5

7j 1;
A 5L: @C K 7 5D57 +M%+); DA

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: @ 8G %LK 5HPF 65G98 8F @B;
      7 CBHFC @: @ 8"
      &LA B9F5 @C @65G98 8F @B;
      7 CBHFC @: @ 8"

```

DC FHG

G DD@M'''	%BDH
:I B7HCB %''	%BDH
:I B7HCB &''	%BDH
J 9BH	%BDH
D@C H	%#('''BDH
D@ : .	%G59

: 9B 9F 5 @8 5 H5

HPA D9F5H F9F5B; 9.'.' &: 'HC '%) \$%:
5DDFC L'K 9÷ <H'%%' @6G
: 9@8' G9FJ 7 956@9

— (A C I B H B ; ' < C @ 9 G)
(L) # , ! % % I B 7 " ∇ % \$ \$)



Gilmore
a pro/srv company

9B; B 99F B;

GDA ŽA J 5Ž; 9B &ž(!K 5M%ž%#(“
BDH 'D@aCž%“BDH '6@C7?DC FFG

G49	8K ; BC
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&- %&'

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98" G7 5 @ 9 % (

Gc`XK cf_g

G<99H % C: '

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F9J ~~GC~~ BG

F9J	9FB '#97 C 'B! A 69F	8F5K B	7 <97 ?98	5DDFC J 98
5	9FB '\$&' , %	JOP 4/20/20	CMG 4-20-20	AQP 4/20/20

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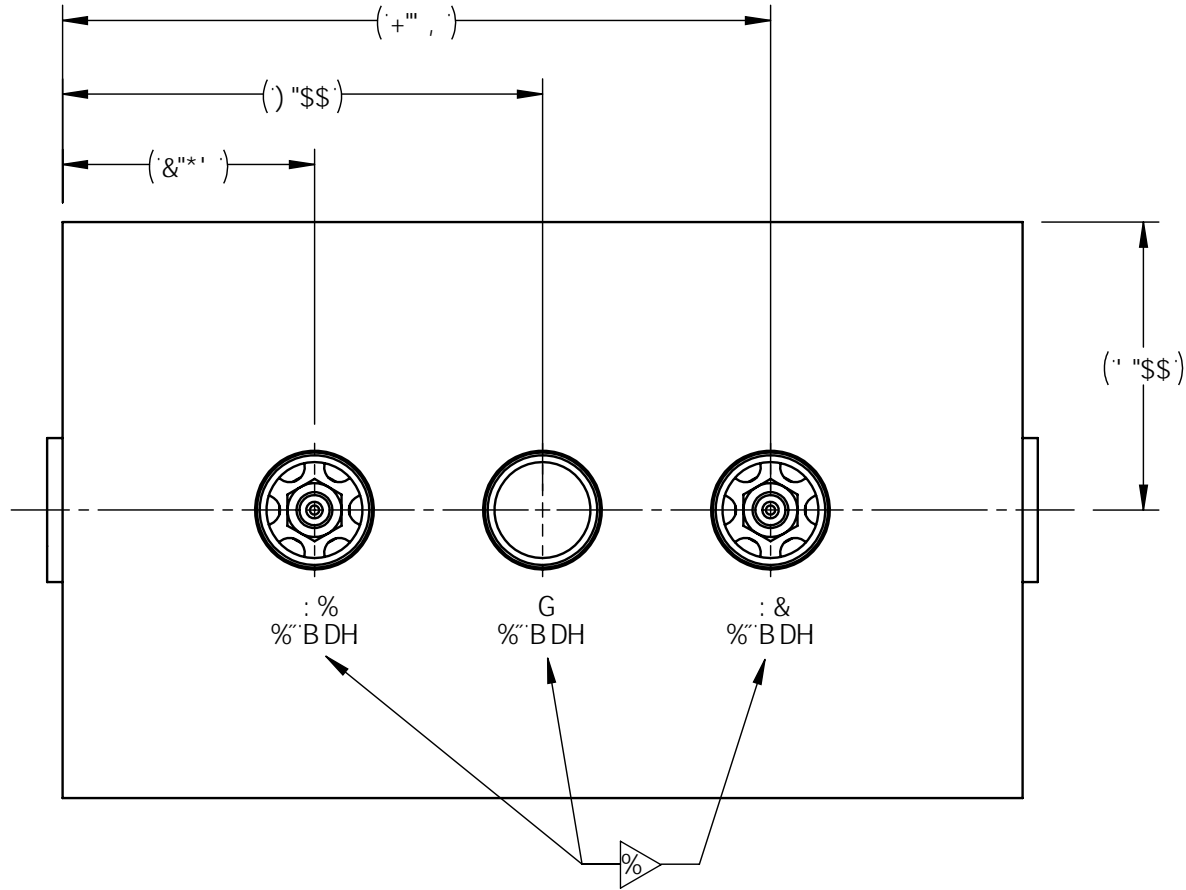
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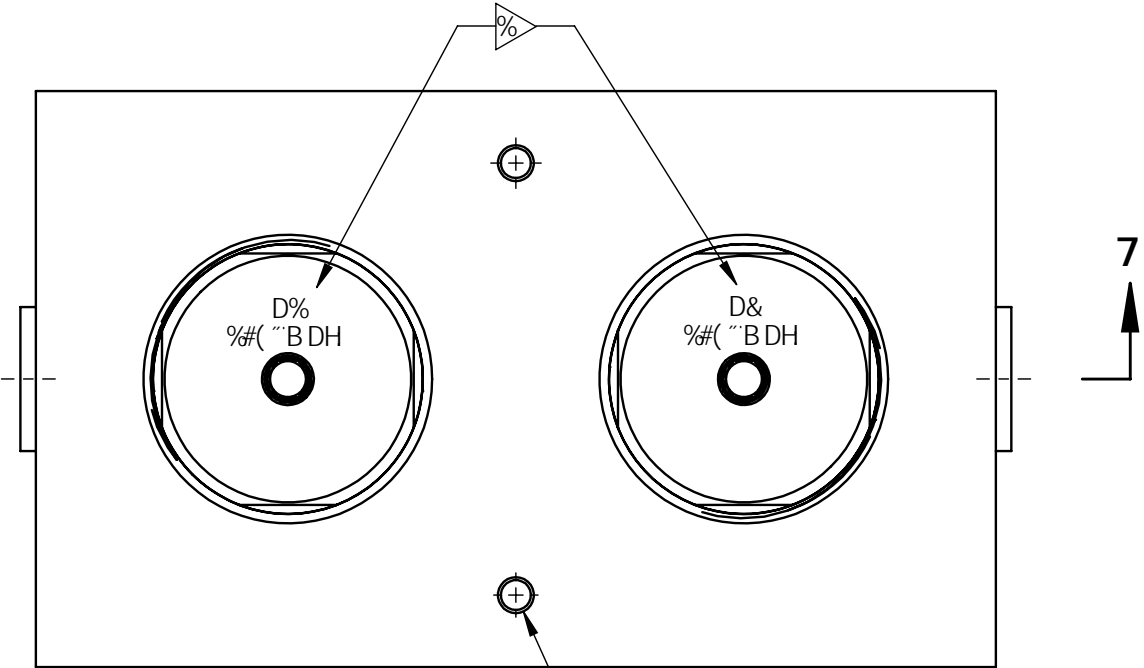
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J 9K 5!5

7
G99'G<99H'

f&L'' #,!%* 'I B7 'L '%&#(''@ : C F' @; HB; '9M9GL



J 9K 6!6



9B; B99F B;

G49

8K ; 'BC

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6@@C: A 5H9F-5@

#9A BC	D5FHB I A 69F	8 9G7 F DHC B	A 5H9F-5@	8Y2Ji`h #E HM	F?	G?
%	%(, \$*&	6@C 7?Z(!K 5M8I 5@%`GDA	5&+*`HD`' %*`f1 %*`GGL	%	.	.
&	&- %%%\$	J 5@ 9Z7 5FH-8; 9ZGDA Z; 9B`&Z%Z B"C""CF`B"7"z) Z\$\$\$DG=GI DD@M%#("' BDH`D@C HDC FH	F9. 9F`HC`B8J`D5FHG	&	▷	*▷
'	% *\$`!\$%*	D@; Z<9LZ<C@@K Z%`G5 9	`5&(`\$HD`' %*	&	▷	*▷

