A

enera Des ription

Series D ilo o era ed servo ro or ional valves rans er he advan a es o he ar er a en ed Voice oil Drive V D o lar er ra e si es or hi h o ra es he hi h dyna ic hi h recision drive o he ilo valve allo s he o i u con rol o he ain s ool and resul s in servo er or ance o he co le e valve

Series D is availa le in si es

D E O

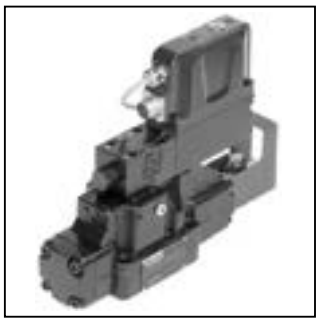
D E O

D E O
or or dia e er u o in

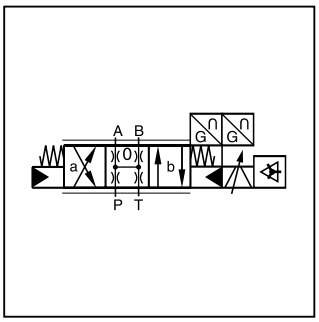
D E O

he o er do n ode or s i h a sa e h osi ion o he D ilo valve his ensures ha he ain s a e is hydraulically alanced a o er do n and allo s he ain s ool s rin o cen er or overla ed s ools , or a ro i a ely s rin o se o s ool osi ion A or or erola s ools

he innova ive in e ra ed re enera ive unc ion in o he A line o ional allo s ne ener y savin circui s or di eren ial cylinders he hy rid version can e s i ched e een re enera ive ode and s andard ode a any i e



D S andard



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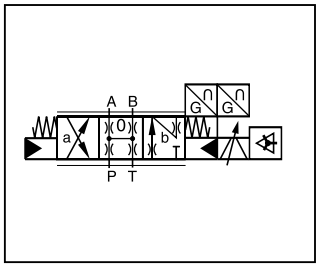
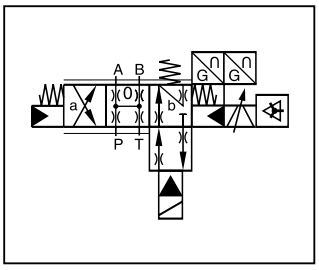


E A e enera ion D



E Hy rid D

Feat res

Hi h dyna ics

Hi h o

De ned s ool osi ionin a o er do n o ional A or A or cen er osi ion or overla ed s ools

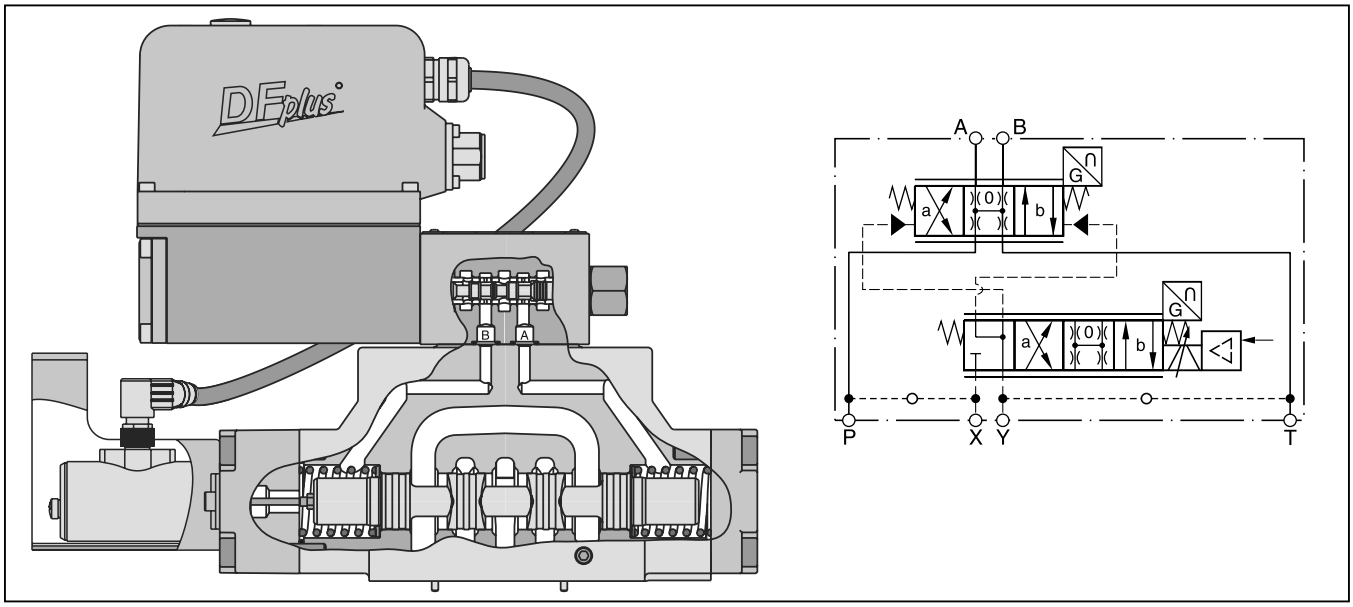
On oard elec ronics

losed loo osi ion con rolled ilo valve and ain s a e

Ener y savin A e enera ion

S i cha le hy rid version

D 1FP Stan ar



WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

A

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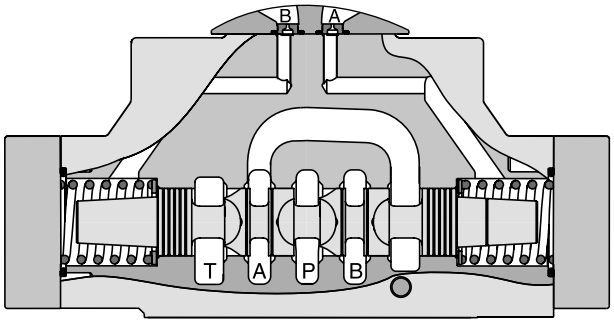
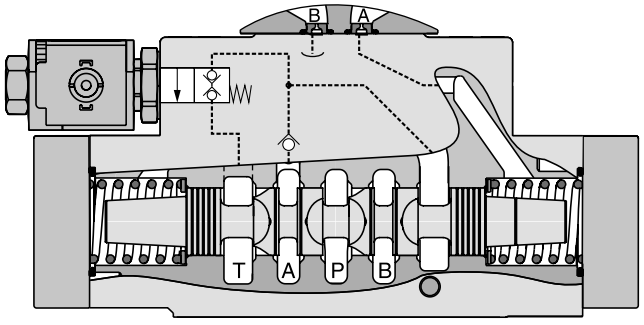
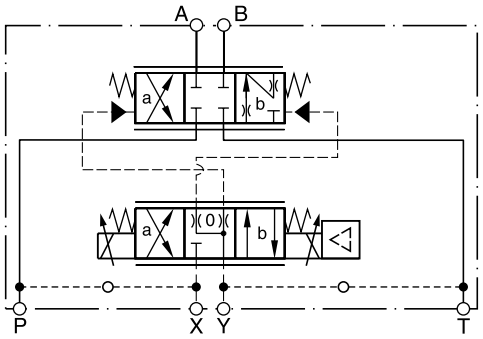
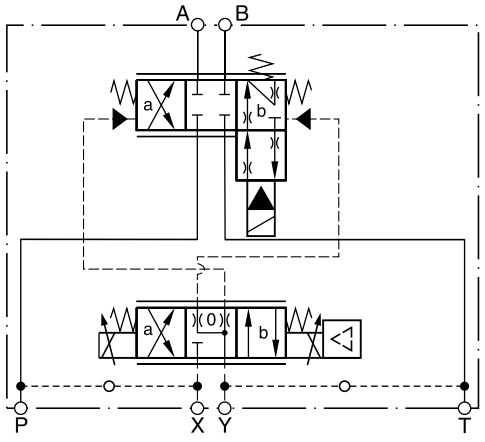
e enerati e a e D*1F



H ri a e D*1F







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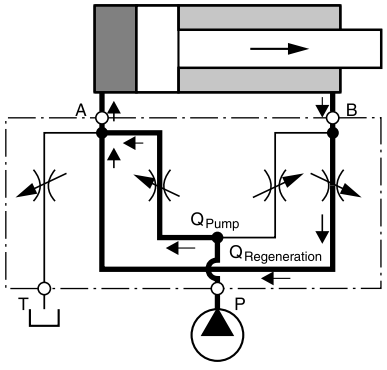

D*1FP H ri a e

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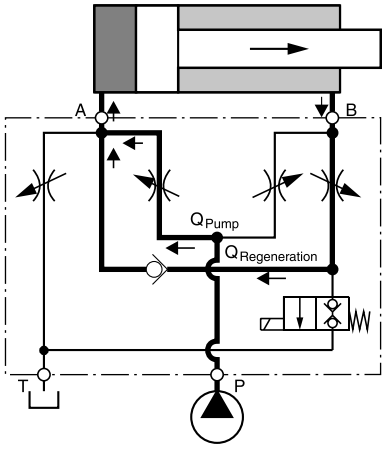

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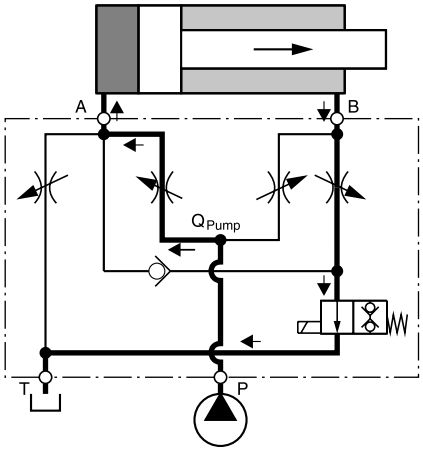


F o ate in o o ina F o

Si e	Spoo	Port					
			P	P	a e	H ri	H ri
D D							
D		on re ues					

D		1	F	P									
Directional Control Valve	Size	NG6 Pilot	Proportional Control	High Response	Spool Type	Flow	Spool Position on Power Down	Pilot Connections	Seal	Input Signal	Options	Hybrid Options	Design Series

NOTE: Not required when ordering.

Co e	Des ription
	E O
	E O
	E O
	E O

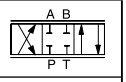
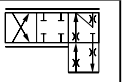
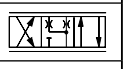
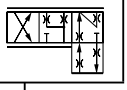
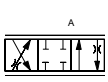
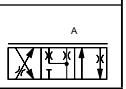
or enlar ed connec ions

Co e	n et	Drain
	n ernal	E ernal
	E ernal	E ernal
	n ernal	n ernal
	E ernal	n ernal

Co e	Des ription
	i rile
V	luorocar on
H	or H uid

Co e	Si na	F n tion
	V	V
E	A	A
	V	V A
S	A	A A

Co e	Des ription
	E acc E
	E acc E
	E Ena le

Stan ar		e enerati e F n tion		H ri F n tion	
Co e	Spoo pe	Co e	Spoo pe	Co e	Spoo pe
er ap 1		er ap 1		er ap 1	
E					
E					
					
					
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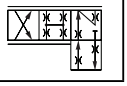
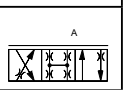
E					
					

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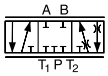
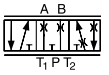
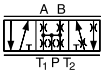

or re enera ive and hy rid unc ion a
D lease re er o solu ions
i h sand ich and ada er la es
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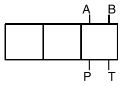
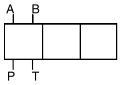
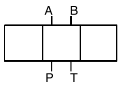
H H

o availa le in valve D

Co e	Spoo Position on Po er Do n
A	
	
	

A ro o enin , only erola s ools
Only overla s ools

Co e	Des ription
	S andard
	Hy rid valve V nor ally closed or s ool y e

See revious a e or re enera ive and hy rid s ool in or a ion no availa le in D

F o P P at Δp ar PS			
Co e	per eterin e e		
	D 1	D 1	D 1 D111
D			
E			
H			

lease order lu s se ara ely See Accessories

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D
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Spe ifi ations

Series D*1FP

A

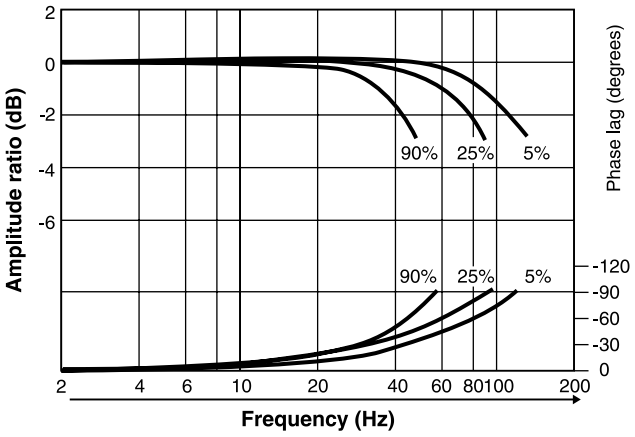
eneral				
Si e	**1 C P**	**1 C P**	**C P**	**C P 1**
o ntin	D SO E O A			
o ntin Position	Unres ric ed			
ient e perat re an e	o o			
Hydraulic				
a i peratin Press re	n ernal ilo Drain , A, , ar S , ar S E ernal ilo Drain , A, , , ar S ar S			
F i	Hydraulic oil as er D , o her on re ues			
F i e perat re	o o			
is osit Per itte e o en e	o cS s o SSU o cS s o SSU			
Fi tration	SO lass acc AS			
o ina F o at Δp ar PS per ontro e e [1] **P P**				
a e o en e F o St **P P**				
e enerati e	De endin on a lica ion, see o curves			
eaka e at 1 ar 1 PS **er ap Spoo** **P P**				
ero ap Spoo **P P**				
Pi ot **P P**	<			
Pi ot S pp Press re	ar S o ar S			
Pi ot F o Step esponse at 1 ar PS **P P**				
S a ic Dyna ic				
Step esponse at 1 Stroke	s	s	s	s
Fre en esponse p it e **± at 1 ar PS P ase**	H H	H H	H H	H H
H steresis	<			
Sensiti it	<			
e perat re Dri t	<			
Elec rical				
D t atio	ED AU O oil e era ure u o ossi le			
Prote tion C ass	in accordance i h E lu ed and oun ed			
S pp o ta e ipp e	V, ri le e , sur e ree			
C rrent Cons ption	A a i u			
np t Si na o ta e	V, ri le e , sur e ree, V →A			
pe an e	Oh			
C rrent	A, ri le e , sur e ree, A →A A ena le o , A ena le on acc A U E			
pe an e	Oh			
np t Capa itan e	n , y ical			
Di erentia np t a i Co e	V or er inal D and E a ains E er inal V or er inal D and E a ains V er inal			
Co e	V or er inal and a ains E er inal V or er inal and a ains V er inal			
Co e	V or er inal D and E a ains E er inal			
na e Si na Co e	V, i Oh			
Dia nosti Si na	V U , ra ed a i u A			
Pre sin	A ediu la			
C	E , E			
e tri a Conne tion Co e	E acc E			
Co e	E acc E			
irin in Co e	A overall raid shield			
Co e	A overall raid shield			
irin en t	a i u			

lo ra e or di eren Δ er con rol ed e $\circ \sqrt{\frac{\Delta}{\Delta_{\circ}}}$ easured i h load ar S ressure dro o con rol ed es

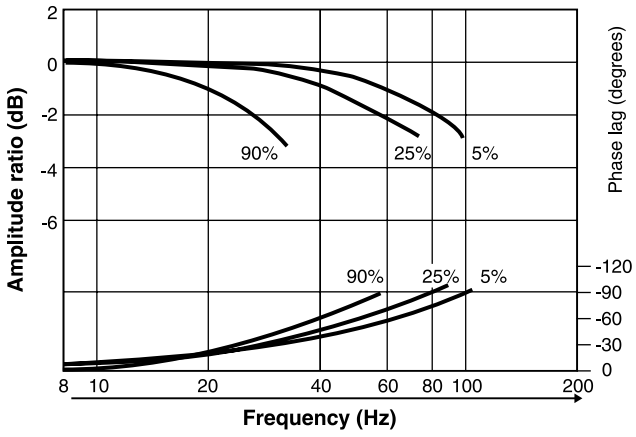
A

Fre en esponse

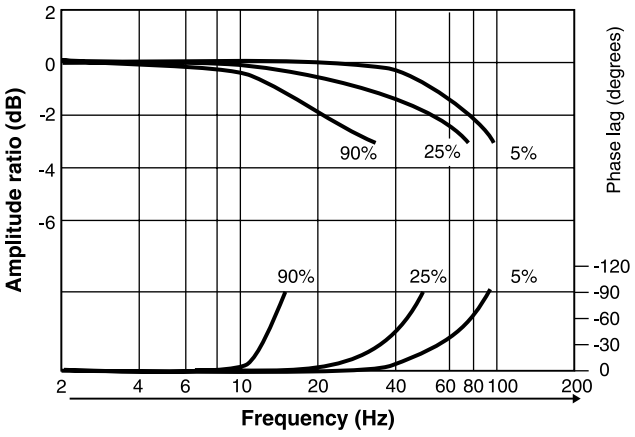
D31FP Frequency Response
±5% / ±25% / ±90% Command Signal
Dynamics at 210 Bar (3045 PSI) Pilot Supply Pressure



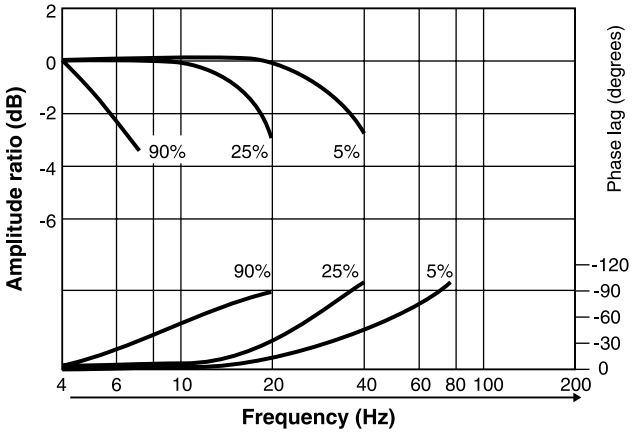
D41FP Frequency Response
±5% / ±25% / ±90% Command Signal
Dynamics at 210 Bar (3045 PSI) Pilot Supply Pressure



D91FP Frequency Response
±5% / ±25% / ±90% Command Signal
Dynamics at 210 Bar (3045 PSI) Pilot Supply Pressure

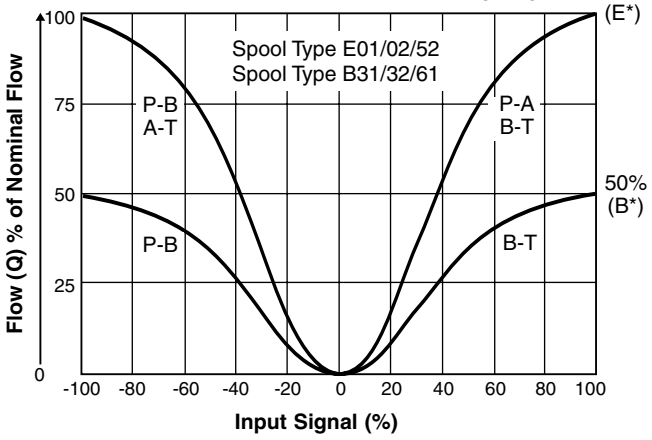


D111FP Frequency Response
±5% / ±25% / ±90% Command Signal
Dynamics at 210 Bar (3045 PSI) Pilot Supply Pressure

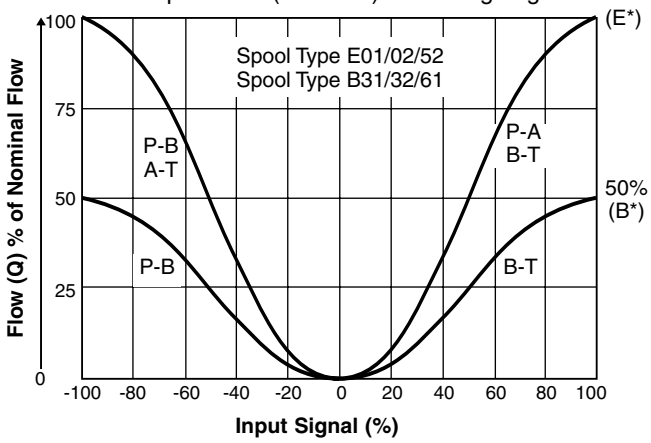


D*1FP F o

D31FP Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge



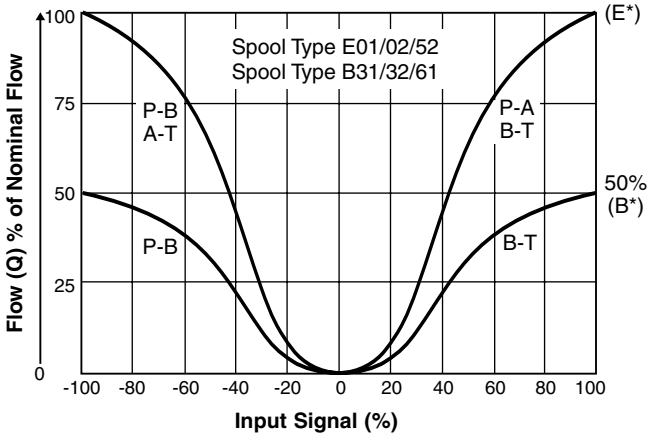
D41FP Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge



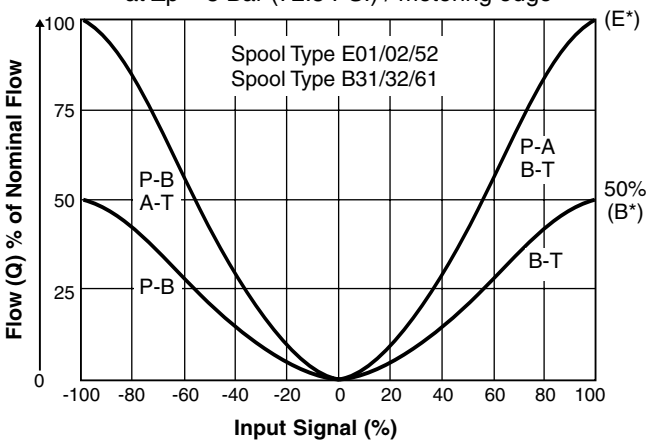
A

D*1FP F o

D91FP Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge

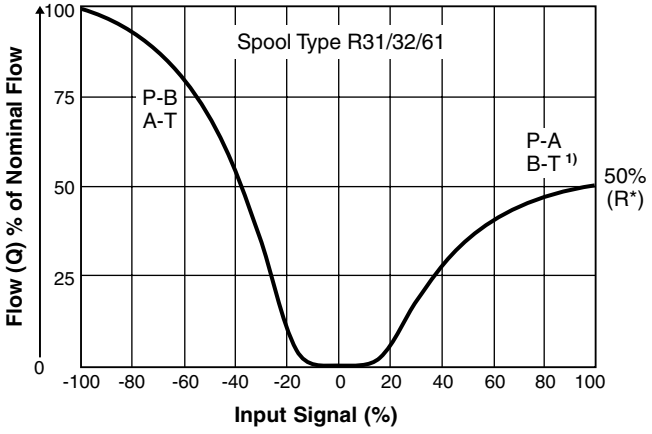


D111FP Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge



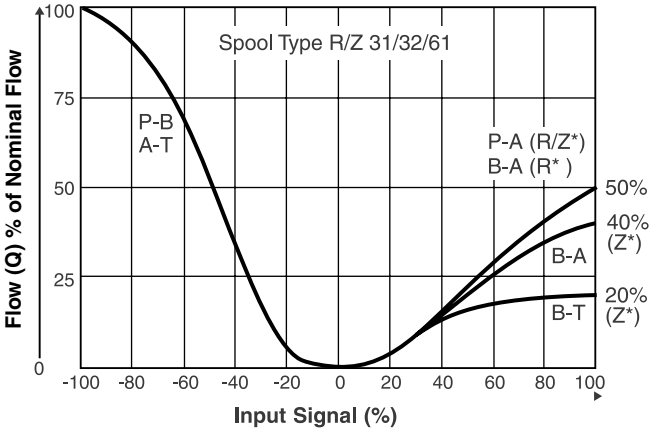
D*1FP F o

D31FPR Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge

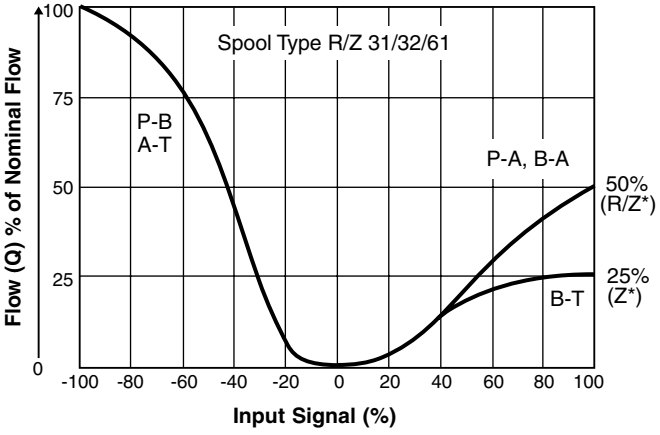


1) with 2 tank ports

D41FPR/Z Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge



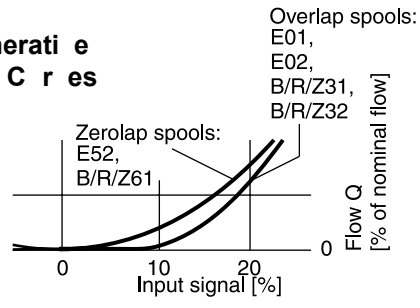
D91FPR/Z Flow Characteristics
at Δp = 5 Bar (72.5 PSI) / metering edge



D111FP

S ool y e on re ues

Detai
Stan ar e enerati e
an H ri F o C r es



A

e tri a Spe ifi ations H ri ption

Du y a io			
ro ec ion lass	in accordance i h E	i h correc ly oun ed lu in connec or	
	D 1	**D 1**	**D111**
Su ly Vol a e V			
olernace Su ly Vol a e			
urren onsu ion A			
o er onsu ion			
Solenoid onnec ion	onnec or as er E		
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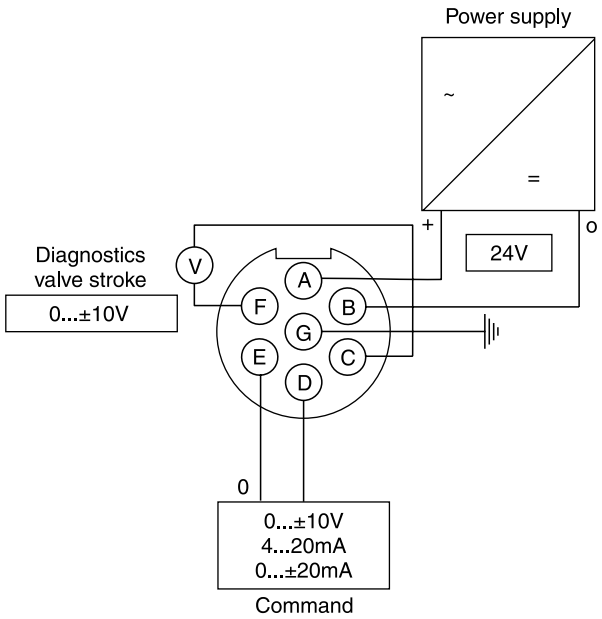
i h elec rical connec ions he ro ec ive conduc or E ⏚ us e connec ed accordin o he relevan re ula ions

Co e
P a 1 1



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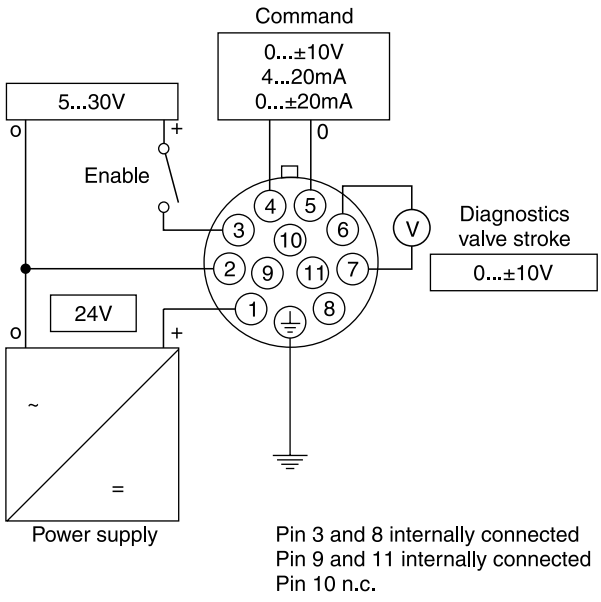
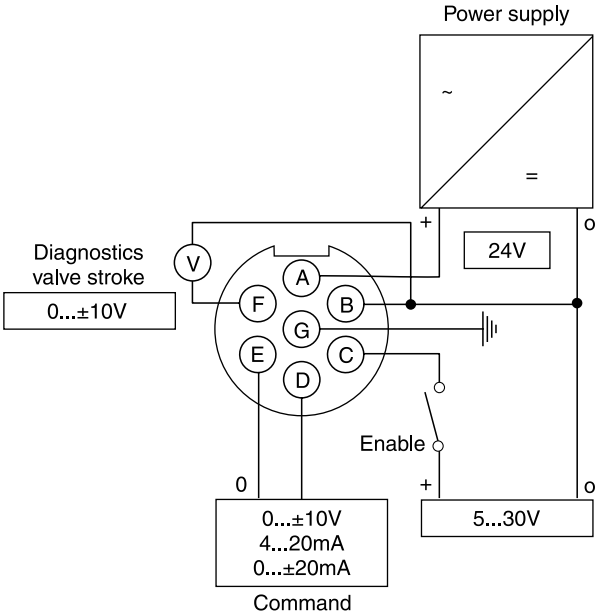
11 P a 1 1



Pin 3 and 8 internally connected
Pin 9 and 11 internally connected
Pin 10 n.c.

Co e
P a 1 1 na e

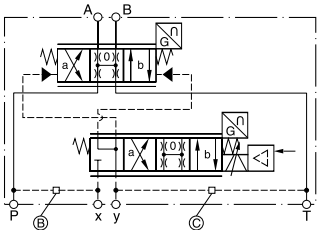


A

Pi ot F o Pi ot i n et S pp an t et Drain

○ open, ● closed

Pilot oil Inlet	Drain	B	C
internal	external	○	●
external	external	●	●
internal	internal	○	○
external	internal	●	○



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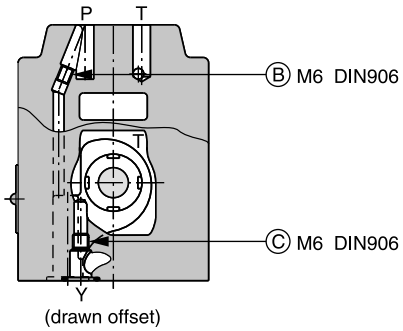

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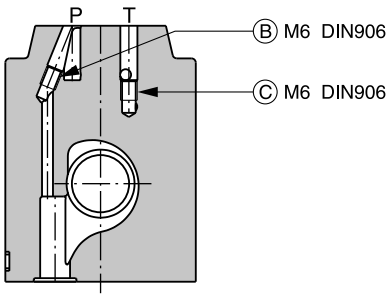

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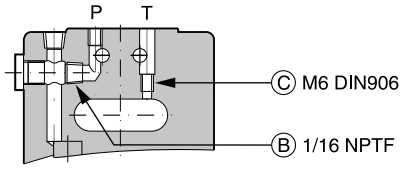

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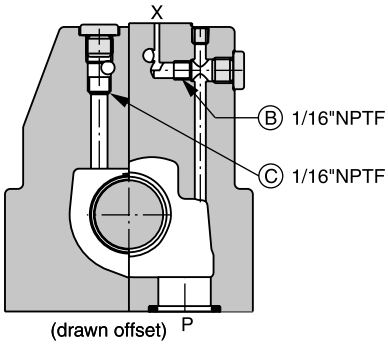

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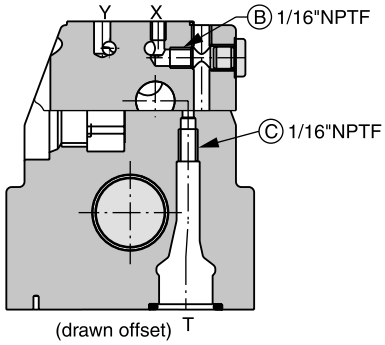

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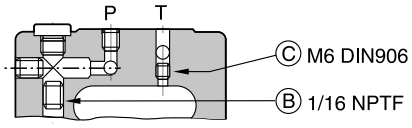

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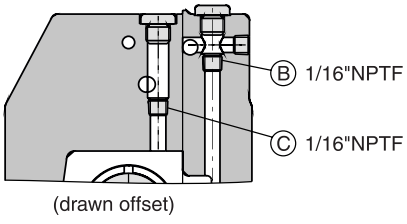

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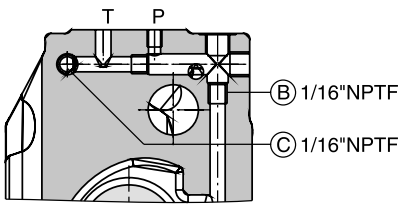

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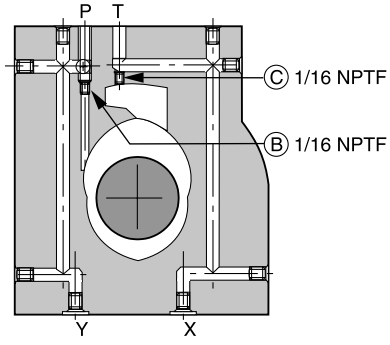

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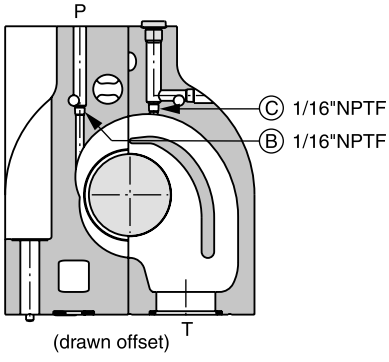

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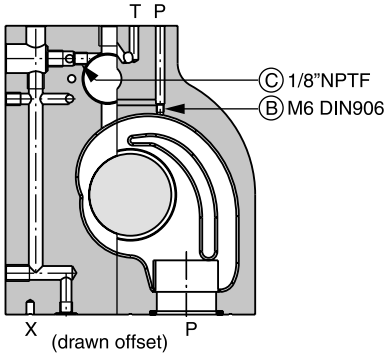

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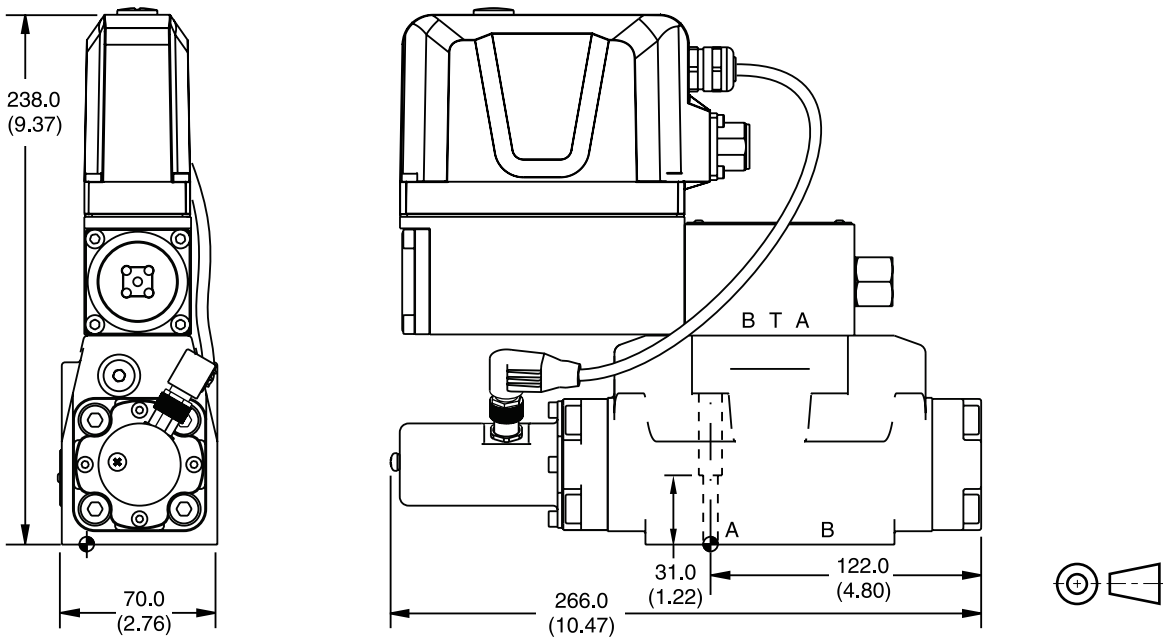

S r a e Finis	Kit			Sea Kit
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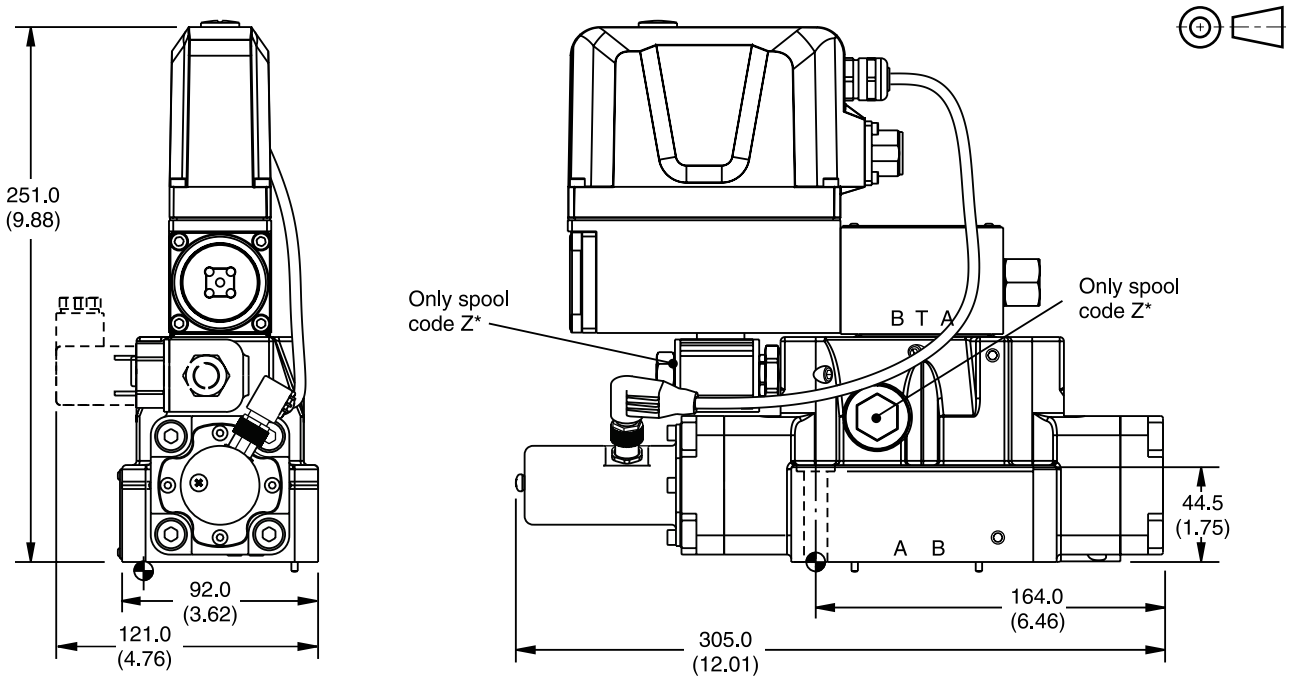

S r a e Finis	Kit			Sea Kit
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Parker Hannifin Corporation
Hydraulic Valve Division
Elyria, Ohio, USA

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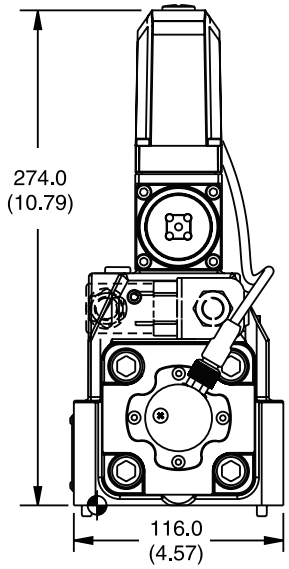

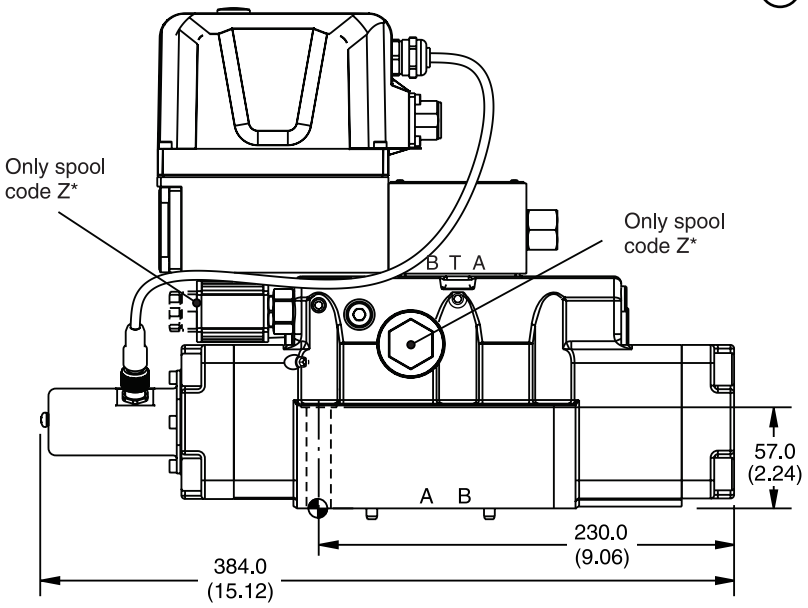

S r a e Finis	Kit			Sea Kit
$\sqrt{R_{max}6.3}$ 0.01/100		D	I	i rile S D luorocar on S D V

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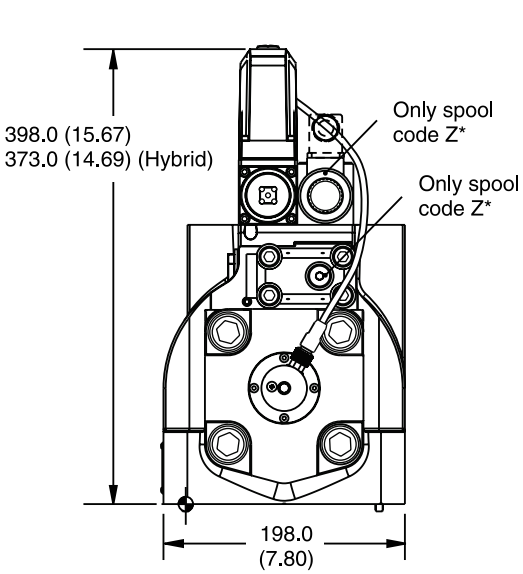

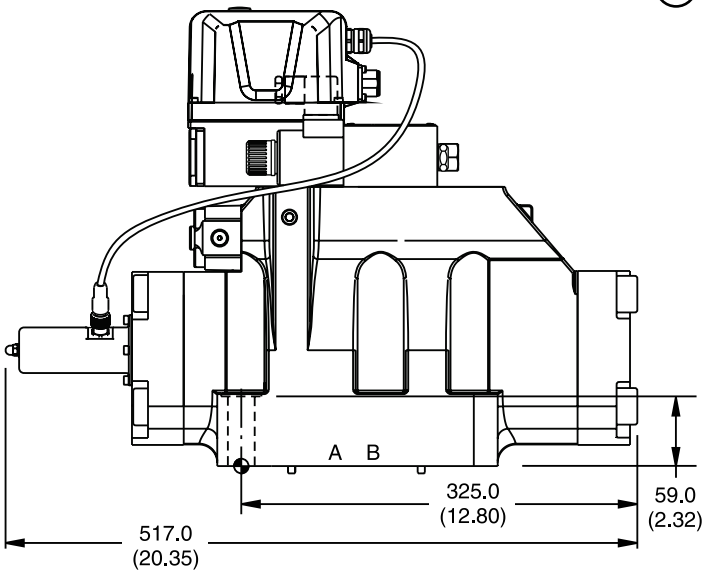

S r a e Finis	Kit			Sea Kit
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