

D-HRC

Danfoss Hydraulic Remote Control



- DHRCJ — Hydraulic Joystick
- DHRCD — Hydraulic Dozer Joystick
- DHRCP — Hydraulic Pedal



Table of Contents

General Description	3
DHRCJ	
Model Code	5
Model Code Explain	8
Dimension Reference	22
DHRCD	
Model Code	25
Model Code Explain	27
Dimension Reference	37
DHRCP	
Model Code	40
Model Code Explain	42
Dimension Reference	49
D-HRC Port Dimension	55
Pressure Control Curves	56

General Description



Description

Hydraulic Remote Controls (HRCs) are used to activate and control directional valves or pumps from a remote and single operating station. HRCs come in hand, foot and mechanically operated versions. On vehicles they are typically installed in seat armrests or in a console.

Supply flow from a dedicated pump

There are various methods of supplying the flow to the Hydraulic Remote Control. The most common and generally recommended is a separate pump. In all applications, filtrations must be installed to maintain the fluid cleanliness level within the specified limit.

Fluctuation of supply pump pressure will not generally cause the HRC output pressure to vary.

What kind of series does D-HRC include?

Product category named as D-HRC means Danfoss Hydraulic Remote Control valve. There are three kinds of series.

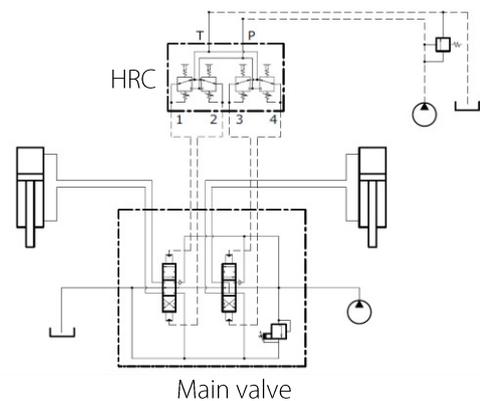
DHRCJ — Joystick

DHRCD — Dozer joystick include single and sectional;

DHRCP — Pedal include dual pedal, single pedal, push-only pedal and mini pedal.

Operation

HRCs are fed a constant input pressure, from which they create reduced output pressures that vary proportionally with lever or pedal stroke. When the HRC is operated, output pilot pressure flows to the main directional control valves, precisely controlling main spool position and direction.



General Description

Why D-HRC?

Market Leader in excavator, with millions of units in the field and over 30 years experience.

With less leakage, small hysteresis and good linearity, D-HRC provide higher precise and repeatable control. That means **Good Controllability**.

Based on robust design, D-HRC ensures **Higher Reliability & Quality**.

Ergonomic design with less operation effort, D-HRC helps guarantee Higher **Productivity & Comfort** operation.

Customized design, various options include wide range of output characteristics, for multipled applications, provide you most **Flexibility**.



General specification

	DHRCJ	DHRC D	DHRC P-Double (Body type 1,2,3)	DHRC P-Single (Body type 4,5,6)	DHRC P- Push only (Body type 7)	DHRC P - Mini (Body type 8)
Max. inlet pressure (bar)	70	50	70	70	50	70
Max. back pressure (bar)	3	3	3	3	3	3
Rated flow (LPM)	20	10 each	20	10	10	20
Output pressure (bar)	0 ~ 30					
Fluid type	Mineral oil					
Fluid temperature	-20°C to 90°C					
Ambient temperature	-40° to 60°C					
Viscosity	12 ~ 400 mm ² /s					
Max level of fluid contamination	18/16/13 - ISO 4406					

Applications

- Excavator
- Truck crane
- Wheel loader
- AWP
- Forklift
- Drilling machine
- Skid steer loader
- Backhoe loader
- Special vehicles

About this document

Unless otherwise specified, the unit of length dimensions in this document is metric millimeters, with inches in parentheses “[]”. For example, 60[2.362] means 60mm [2.362 inch], Ø7[0.275] means Ø7mm [0.275 inch].

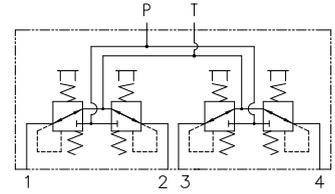
DHRCJ - Danfoss Hydraulic Remote - Control Joystick

Model Code

Description

DHRCJ series is a double function valve, typically used to control two acting spools using a single joystick by operation direction of X and Y axes. Based on proportional pressure reducing concept, DHRCJ are fed a constant input pressure, from which they create reduced output pressures that vary proportionally with lever or pedal stroke.

DHRCJ series provide multiple options for bodies, grips, switches, out put pressure and so on.



Functional Symbol

DHRCJ	1	0	1	1	3	0	0	1	L	0C	0	1	0	D21	MXXX	X	A01	A02	A	00	0	A
1.2.3.4.5	6	7	8	9	10	11	12	13	14	15.16	17	18	19	20.21.22	23.24.25.26	27	28.29.30	31.32.33	34	35.36	37	38

Rules		
Body type		
1 2 3 4 5 6		
•	1.2.3.4.5	D-HRC type
		DHRCJ Danfoss Hydraulic Remote Controls Joystick
•	6	Body type
•		1 Standard AL
•		2 Small AL 98[3.858] diameter
•		3 Small AL 89[3.503] diameter
•		4 Primal Iron type black
•		5 Primal Iron type blue
•		6 Mega Aluminum type
•	7	Auxiliary valve
•		0 No
•		1 Floating valve 23bar on port 1
•	8	Port
•		1 BSPP G3/8 O-ring sealing
•		2 BSPP G3/8, P port G1/4 -Oring sealing
•		3 BSPP G1/4 O-ring sealing
•		4 BSPP G1/4 (ISO 1179-1) O-ring flat sealing
•		5 UNF 9/16 (ISO 11926-1) O-ring sealing
•	9	Installation
•		1 PCD113[4.448]x Ø7[0.275] hole
•		2 PCD118.9[4.681] x Ø7[0.275] hole
•		3 PCD100[3.937] 113[4.448] x Ø7[0.275] slot
•		4 PCD113[4.448] 107[4.212] x Ø7[0.275] slot
•	10	Wire harness hole
•		1 Ø8[0.314] hole
•		2 2-Ø8[0.314] hole
•		3 Ø8[0.314] hole with 5[0.196] slot
•		4 Ø9[0.354] hole with 7[0.275] slot
•	11	Detent option 1
•		0 No
•		1 Electromagnetic type 1
•	12	Detent option 2
•		0 No
•		1 24V DC electromagnetic detent on port 1 3 and 4 without pre-feeling
•		2 24V DC electromagnetic detent on port 1 3 and 4 with pre-feeling
•		3 12V DC electromagnetic detent on port 3 and 4 with pre-feeling
•		4 12V DC electromagnetic detent on port 1 and 2 with pre-feeling
•		5 12V DC electromagnetic detent on port 1 with pre-feeling
•		6 12V DC electromagnetic detent on port 1 and 4 with pre-feeling
•	13	Bundle of wire harness
•		0 Not applicable
•		1 One bundle
•		2 Two bundle

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ	1	0	1	1	3	0	0	1	L	0C	0	1	0	D21	MXXX	X	A01	A02	A	00	0	A
1.2.3.4.5	6	7	8	9	10	11	12	13	14	15.16	17	18	19	20.21.22	23.24.25.26	27	28.29.30	31.32.33	34	35.36	37	38

1	2	3	4	5	6	14	Actuator orientation	X	Not applicable
.	.	.	.	.	.		L	Left hand
.	.	.	.	.	.		R	Right hand
.	.	.	.	.	.		P	Perpendicular
.				
.	15,16	Grip type and angle	00	Not applicable
.	.	.	.	.	.		01	A type simple grip 23degree bar length 66[2.598]
.	.	.	.	.	.		02	B type simple grip 23degree bar length 60[2.362]
.	.	.	.	.	.		03	B type simple grip 23degree bar length 77[3.031]
.	.	.	.	.	.		04	B type simple grip 23degree bar length 93[3.661]
.	.	.	.	.	.		05	C type multiple button grip 23degree bar length 73[2.874]
.	.	.	.	.	.		06	C type multiple button grip 23degree bar length 83[3.267]
.	.	.	.	.	.		07	C type multiple button grip 23degree bar length 86.5[3.405]
.	.	.	.	.	.		08	C type multiple button grip 23degree bar length 88[3.464]
.	.	.	.	.	.		09	C type multiple button grip 29degree bar length 85[3.464]
.	.	.	.	.	.		0A	D type multiple function grip 0degree bar length 69[2.716]
.	.	.	.	.	.		0B	D type multiple function grip 19degree bar length 44.5[1.752]
.	.	.	.	.	.		0C	D type multiple function grip 19degree bar length 57[2.244]
.	.	.	.	.	.		0D	D type multiple function grip 19degree bar length 62.5[2.460]
.	.	.	.	.	.		0E	D type multiple function grip 19degree bar length 73[2.874]
.	.	.	.	.	.		0F	D type multiple function grip 27degree bar length 62.5[2.460]
.	.	.	.	.	.		0G	D type multiple function grip 27degree bar length 66.5[2.618]
.	.	.	.	.	.	0H	D type multiple function grip 27degree bar length 68[2.677]	
.	.	.	.	.	.	0J	E type(D grip short version) multiple function grip 19degree bar length 44.5[1.752]	
.	.	.	.	.	.	0K	B type simple grip 19degree bar length 77[3.031]	
.	17	Special mark	0	Not applicable
.	.	.	.	.	.		1	Horn mark on the button
.	.	.	.	.	.		2	Special color requirement_depends on customer
.	18	Boots option	0	Not applicable
.	.	.	.	.	.		1	Standard for C D E grip
.	.	.	.	.	.		2	Standard long for C D E grip
.	.	.	.	.	.		3	Standard body mounting PCD113[4.448] 107[4.212] slot for D E grip
.	.	.	.	.	.		4	Standard long without inner boots for C D E grip
.	.	.	.	.	.		5	Standard short without inner boots for C D E grip
.	.	.	.	.	.		6	Standard body mounting type PCD113[4.448] hole for C D E grip
.	.	.	.	.	.		7	Small without inner boots for D E grip
.	.	.	.	.	.		8	Standard body mounting type PCD113[4.448] hole for B grip
.	.	.	.	.	.		9	Standard body mounting type PCD113[4.448] hole for A grip
.	.	.	.	.	.		A	Standard long wide angle for C D E grip
.	.	.	.	.	.		B	Standard EMD option for C D E grip
.	.	.	.	.	.		C	Standard body mounting type PCD113[4.448] hole for D E grip
.	.	.	.	.	.	D	Standard body mounting type PCD118.9[4.681] hole for B grip	
.	19	Switch options 1_switch box rotation	0	Not applicable
.	.	.	.	.	.		1	left 90degree rotation
.	.	.	.	.	.		2	right 90degree rotation
.	.	.	.	.	.		3	180degree rotation
.	20,21,22	Switch options 2	000	No switch
.	.	.	.	.	.		XXX	See switch table
.	23	Electric connector 1 (options same as position 26)		
.	24	Electric connector 2 (options same as position 26)		
.	25	Electric connector 3 (options same as position 26)		
.	26	Electric connector 4	X	No connector
.	.	.	.	.	.		A	JIS D5403 CA104 CB104 terminal end
.	.	.	.	.	.		B	JIS D5403 CA104 2EA terminal end male
.	.	.	.	.	.		C	JIS D5403 CB104 2EA terminal end female
.	.	.	.	.	.		D	Korea Electric Terminal KET 2Pin
.	.	.	.	.	.		E	Korea Electric Terminal KET 3Pin

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ	1	0	1	1	3	0	0	1	L	0C	0	1	0	D21	MXXX	X	A01	A02	A	00	0	A
1.2.3.4.5	6	7	8	9	10	11	12	13	14	15.16	17	18	19	20.21.22	23.24.25.26	27	28.29.30	31.32.33	34	35.36	37	38

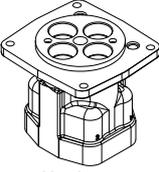
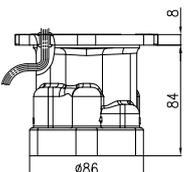
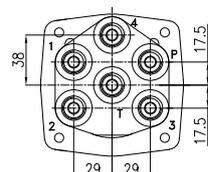
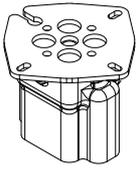
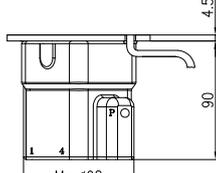
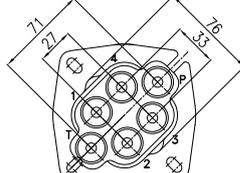
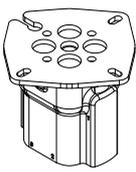
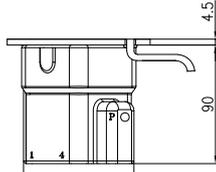
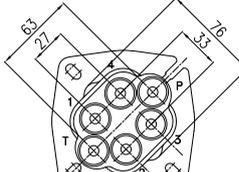
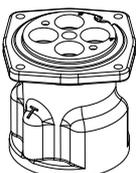
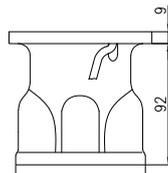
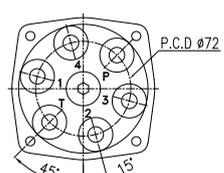
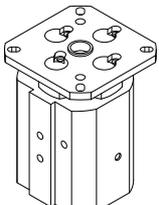
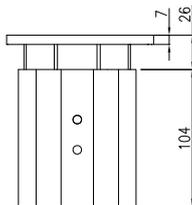
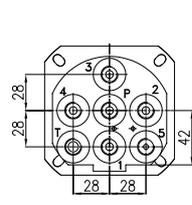
1	2	3	4	5	6			
.	26	Electric connector 4	
.		F	Korea Electric Terminal KET 4Pin
.		G	Korea Electric Terminal KET 6Pin
.		H	Korea Electric Terminal KET 8Pin
.		I	DT04-2P Receptacle Assembly
.		J	DT04-3P Receptacle Assembly
.		K	DT04-4P Receptacle Assembly
.		L	DT04-6P Receptacle Assembly
.		M	DT04-08PA Receptacle Assembly
.		N	DT04-6P-E004 Receptacle Assembly
.		O	DT06-2S Plug Assembly
.		p	Female crimp terminal
.		27	Hose fitting
.	X		No fitting
.	A		G1/4 x UNF 9/16 flat face sealing with filter for P port
.	B		G3/8 x UNF 9/16 flat face sealing with filter for P port
.	C		G3/8 x UNF 11/16 flat face sealing with filter for P port
.	D		G1/4 x UNF 9/16 flat face sealing with filter for P port and 2 4 port orifice 1.2[0.047]
.	E	G3/8 x UNF 9/16 flat face sealing with filter for P port and 2 4 port orifice 1.2[0.047]	
.	28,29,30	Output Pressure -1&3 ports	
.		000	Not applicable
.		A##	A type pressure curve, see curve table
.		B##	B type pressure curve, see curve table
.	31,32,33	Output Pressure -2&4 ports	
.		000	Not applicable
.		A##	A type pressure curve, see curve table
.		B##	B type pressure curve, see curve table
.	34	Operating type and torque	
.		A	Spring return with torque 0.42Nm[0.30lbf ft]@starting 0.61Nm[0.44lbf ft]@full stroke exclusive of set spring
.		B	Spring return with torque 0.47Nm[0.34lbf ft]@starting 0.78Nm[0.57lbf ft]@full stroke exclusive of set spring
.		C	Spring return with torque 0.52Nm[0.38lbf ft]@starting 0.87Nm[0.64lbf ft]@full stroke exclusive of set spring
.		D	Spring return with torque 0.57Nm[0.42lbf ft]@staring 0.82Nm[0.60lbf ft]@full stroke exclusive of set spring
.		E	Spring return with torque 0.68Nm[0.50lbf ft]@starting 0.84Nm[0.61lbf ft]@full stroke exclusive of set spring
.		F	Spring return with torque 0.67Nm[0.49lbf ft]@staring 1.08Nm[0.79lbf ft]@full stroke exclusive of set spring
.		G	Spring return with torque 0.40Nm[0.29lbf ft]@starting 0.62Nm[0.45lbf ft]@full stroke exclusive of set spring
.		H	Spring return with torque 0.43Nm[0.31lbf ft]@starting 0.94Nm[0.69lbf ft]@full stroke exclusive of set spring
.		J	Spring return with torque 0.54Nm[0.39lbf ft]@starting 0.61Nm[0.44lbf ft]@full stroke exclusive of set spring
.		K	Spring return with torque 0.41Nm[0.30lbf ft]@staring 0.54Nm[0.39lbf ft]@full stroke exclusive of set spring
.	L	Spring return with torque 0.47Nm[0.34lbf ft]@staring 0.74Nm[0.54lbf ft]@full stroke exclusive of set spring	
.	M	Spring return with torque 0.61Nm[0.45lbf ft]@staring 0.95Nm[0.70lbf ft]@full stroke exclusive of set spring	
.	N	Spring return with torque 0.56Nm[0.41lbf ft]@staring 0.89Nm[0.65lbf ft]@full stroke exclusive of set spring	
.	35,36	Special features	
.		00	No
.	TBD	Customized identification can be discussed	
.	37	Identification	
.		0	No
.	TBD	Customized identification can be discussed	
.	38	Design code	
.	A	First Design	

Note:
 1. "##" means No. chosen from Pressure Control Curves table.
 2. "." means available options.

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

Model Code Explain

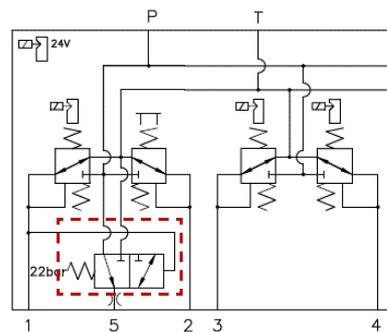
DHRCJ - Body shape and port position

Model code position 6	Description	3D diagram	2D diagram	Port position
1	Standard AL	 Cover and body are integrated.		
2	Small AL 98[3.858] diameter	 Cover and body are separate.		
3	Small AL 89[3.503] diameter	 Cover and body are separate.		
4	Primal Iron black	 Cover and body are integrated.		
5	Primal Iron blue			
6	Mega AL	 Cover and body are separate.		

DHRCJ – Auxiliary valve

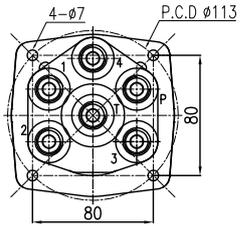
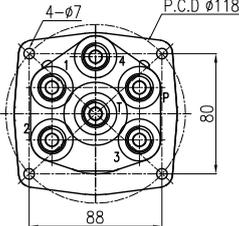
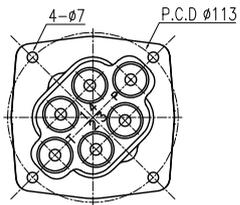
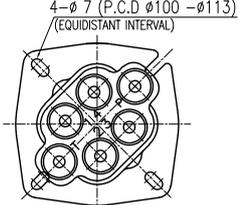
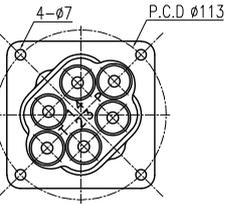
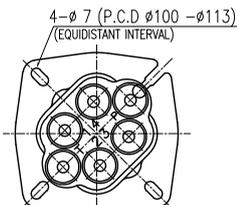
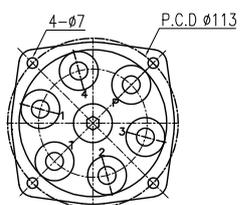
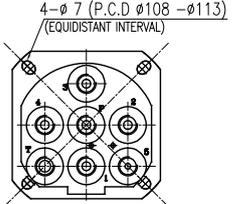
When output pressure of port 1 less than a certain value, port 5 will transport pressure from pilot P line, otherwise port 5 will be connected to tank.

This feature can be applied for float function control.



DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Installation

Installation option Model code position 9		1	2	3	4
		PCD113[4.448] xØ7[0.275] hole	PCD118.9[4.681] xØ7[0.275] hole	PCD100[3.937]-113[4.448] xØ7[0.275] slot	PCD108[4.252]-113[4.448] xØ7[0.275] slot
1	Standard AL				
	Small AL 98[3.858] diameter				
3	Small AL 89[3.503] diameter	 Note: This is not in mass production.			
4,5	Primal Iron				
6	Mega AL				

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Wire harness hole

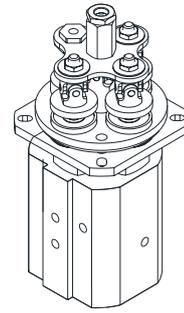
Installation option Model code position 10		1	2	3	4
		Ø8[0.314] hole	2-Ø8[0.314] hole	Ø8[0.314] hole with 5[0.196] slot	Ø9[0.354] hole with 7[0.275] slot
1	Standard AL				
	Small AL 98[3.858] diameter				
3	Small AL 89[3.503] diameter	 <small>Note: This is not in mass production.</small>			
4,5	Primal Iron				
6	Mega AL				

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Detent function

Detent apply for lock the position of grip when operated to a certain angel by electric or mechanical force. When operated by a force in negative direction, the grip can be released.

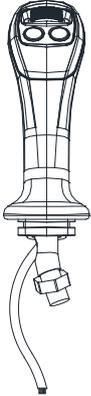
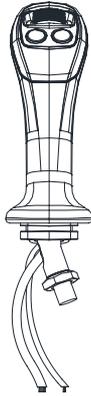
This normally applied for keeping position of controlled components like spool, to keep the movement continues until release the detent.



Model code position 12	Description	Diagram
0	No	
1	24V DC electromagnetic detent on port 1 3 and 4	
2	24V DC electromagnetic detent on port 1 3 and 4 with pre-feeling	
3	12V DC electromagnetic detent on port 3 and 4 with pre-feeling	
4	12V DC electromagnetic detent on port 1 and 2 with pre-feeling	
5	12V DC electromagnetic detent on port 1 with pre-feeling	
6	12V DC electromagnetic detent on port 1 and 4 with pre-feeling	

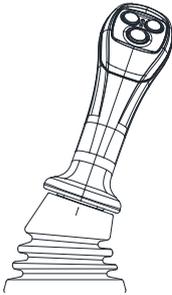
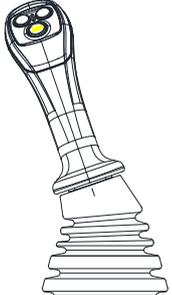
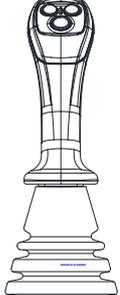
DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Bundle of wire harness

Model code position 13	1	2
Description	One bundle	Two bundles
Diagram		

Note: Above grip is only as example to show different bundle quantity.

DHRCJ – Actuator orientation

Model code position 13	X	L	R	P
Description	Not available	Left hand	Right hand	Perpendicular
Diagram				

Note: Above grip shape and height is only as example to show different actuator orientation.

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Grip types

Model code position 15,16	00	01
Description	Not applicable	A type simple grip 23degree bar length 66[2.598]
Dimension		

Model code position 15,16	02	03	04	0K
Description	B type simple grip 23degree bar length 60[2.362]	B type simple grip 23degree bar length 77[3.031]	B type simple grip 23degree bar length 93[3.661]	B type simple grip 19degree bar length 77[3.031]
Dimension				

Model code position 15,16	05	06	07	08	09
Description	C type multiple button grip 23degree bar length 73[2.874]	C type multiple button grip 23degree bar length 83[3.267]	C type multiple button grip 23degree bar length 86.5[3.405]	C type multiple button grip 23degree bar length 88[3.464]	C type multiple button grip 29degree bar length 85[3.464]
Dimension					

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Grip types

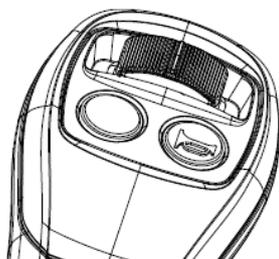
Model code position 15,16	0A	0B	0C	0D	0E
Description	D type multiple function grip 0degree bar length 69[2.716]	D type multiple function grip 19degree bar length 44.5[1.752]	D type multiple function grip 19degree bar length 57[2.244]	D type multiple function grip 19degree bar length 62.5[2.460]	D type multiple function grip 19degree bar length 73[2.874]
Dimension					

Model code position 15,16	0F	0G	0H	0J
Description	D type multiple function grip 27degree bar length 62.5[2.460]	D type multiple function grip 27degree bar length 66.5[2.618]	D type multiple function grip 27degree bar length 68[2.677]	E type(D grip short version) multiple function grip 19degree bar length 44.5[1.752]
Dimension				

Note: H means length, A means angel on dimension diagrams.

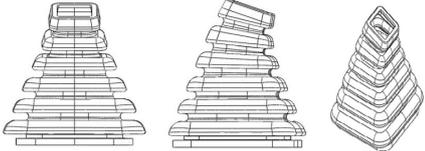
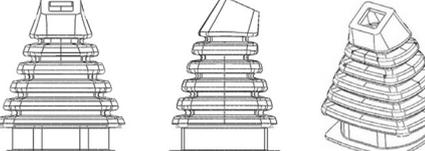
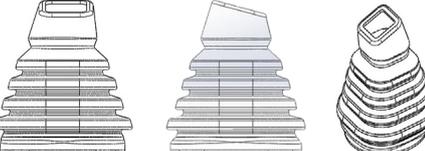
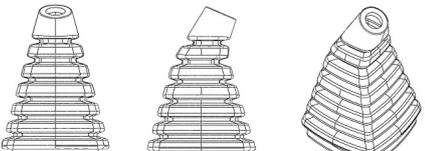
DHRCJ – Special mark

The appearance of horn mark.



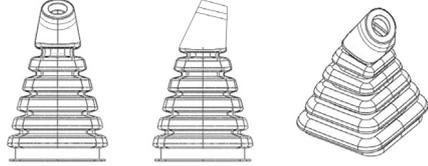
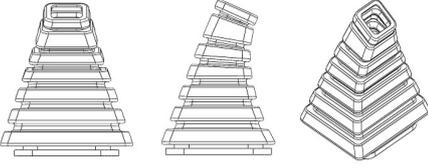
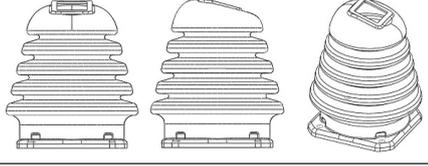
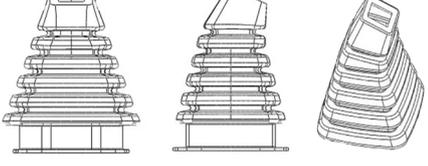
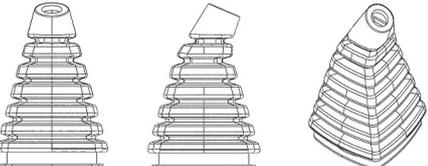
DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Boots

Model code Position 18	Description	Diagram
0	Not applicable	
1	Standard for C D E grip	
2	Standard long for C D E grip	
3	Standard body mounting PCD113[4.448] 107[4.212] slot for D E grip	
4	Standard long without inner boots for C D E grip	
5	Standard short without inner boots for C D E grip	
6	Standard body mounting type PCD113[4.448] hole for C D E grip	
7	Small without inner boots for D E grip	
8	Standard body mounting type PCD113[4.448] hole for B grip	

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Boots

Model code Position 18	Description	Diagram
9	Standard body mounting type PCD113[4.448] hole for A grip	
A	Standard long wide angle for C D E grip	
B	Standard EMD option for C D E grip	
C	Standard body mounting type PCD113[4.448] hole for D E grip	
D	Standard body mounting type PCD118.9[4.681] hole for B grip	

DHRCJ – Switch box rotation

Model code position 19	0	1	2	3
Description	Not applicable	Left 90° rotation	Right 90° rotation	180° rotation
Diagram				

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Switch option

Grip	Model code position 20,21,22	Code meaning	Picture (Front and rear side)
A grip 	A00	No button	
	A10	1 button in front	
B grip 	B10	1 button in front	
	B11	1 button in front, 1 button in back	
C grip 	C10	1 button in front	
	C20	2 buttons in front	
	C30	3 buttons in front	
D grip 	D00	No button	
	D10	1 button in front	
	D11	1 button in front, 1 button in back	
	D20	2 buttons in front	
	D21	2 buttons in front and 1 button in back	
	D30/G30 *	3 buttons in front	
	D31/G31 *	3 buttons in front and 1 button in back	
	D3F	3 buttons in front and 1 FNR in back	
	D3G	3 buttons in front and 1 FR in back	
	E20 / F20 / H20 / J20 **	Roller and 2 buttons in front	
	E21 / F21 / H21 / J21 **	Roller and 2 buttons in front, 1 button in back	
	E2F / F2F / H2F / J2F **	Roller and 2 buttons in front, 1 FNR in back	
	E2G / F2G / H2G / J2G **	Roller and 2 buttons in front, 1 FR in back	

Note:

Codes marked "*" means in order: Switches without IP/ Switches with IP.

Codes marked "**" means in order: Convex roller and switches, without IP/ Concave roller and switches, without IP/ Convex roller and switches, with IP/ Concave roller and switches, with IP.

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Switch option

Grip	Model code position 20,21,22	Code meaning	Picture (Front and rear side)
D grip 	N.A. / N.A. / H10 / J10 **	Roller and 1 button in front	
	N.A. / N.A. / H11 / J11 **	Roller and 1 button in front, 1 button in back	
	N.A. / N.A. / H11F / J11F **	Roller and 1 button in front, 1 FNR in back	
	N.A. / N.A. / H11G / J11G **	Roller and 1 button in front, 1 FR in back	
E grip 	K00	No button	
	K10	1 button in front	
	K11	1 button in front, 1 button in back	
	K20	2 buttons in front	
	K21	2 buttons in front and 1 button in back	
	K2B	2 buttons in front and 1 big button in back	
	K30 / P30 *	3 buttons in front	
	K31 / P31 *	3 buttons in front and 1 button in back	
	K3B	3 buttons in front and 1 big button in back	
	L20 / M20 / Q20 / R20 **	Roller and 2 buttons in front	
	L21 / M21 / Q21 / R21 **	Roller and 2 buttons in front, 1 button in back	
	N.A. / N.A. / Q2B / R2B **	Roller and 2 buttons in front, 1 big button in back	
	N.A. / N.A. / Q10 / R10 **	Roller and 1 button in front	
	N.A. / N.A. / Q11 / R11 **	Roller and 1 button in front, 1 button in back	
	N.A. / N.A. / Q11B / R11B **	Roller and 1 button in front, 1 big button in back	

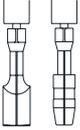
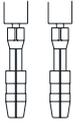
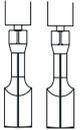
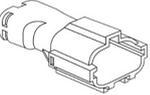
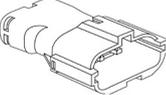
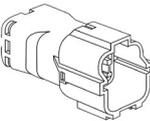
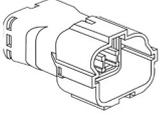
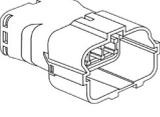
Note:

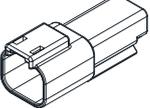
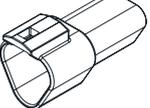
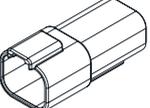
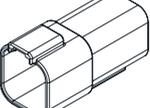
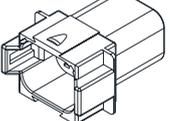
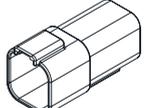
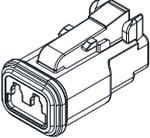
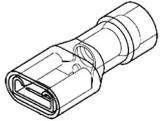
Codes marked "*" means in order: Switches without IP/ Switches with IP.

Codes marked "**" means in order: Convex roller and switches, without IP/ Concave roller and switches, without IP/ Convex roller and switches, with IP/ Concave roller and switches, with IP.

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Connector

Model code position 23~26	Description	Diagram
X	No connector	
A	JIS D5403 CA104 & CB104 terminal end	
B	JIS D5403 CA104 2EA terminal end male	
C	JIS D5403 CB104 2EA terminal end female	
D	Korea Electric Terminal KET 2Pin	
E	Korea Electric Terminal KET 3Pin	
F	Korea Electric Terminal KET 4Pin	
G	Korea Electric Terminal KET 6Pin	
H	Korea Electric Terminal KET 8Pin	

Model code position 23~26	Description	Diagram
I	Deuchi DT04-2P Receptacle Assembly	
J	Deuchi DT04-3P Receptacle Assembly	
K	Deuchi DT04-4P Receptacle Assembly	
L	Deuchi DT04-6P Receptacle Assembly	
M	Deuchi DT04-08PA Receptacle Assembly	
N	Deuchi DT04-6P-E004 Receptacle Assembly	
O	Deuchi DT06-2S Plug Assembly	
P	Female crimp terminal	

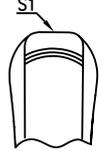
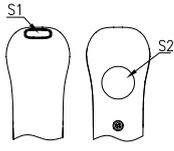
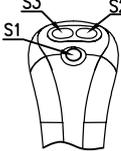
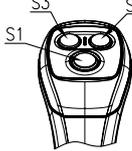
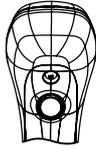
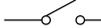
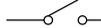
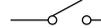
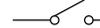
DHRCJ - Danfoss Hydraulic Remote - Control Joystick

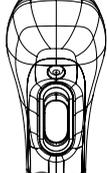
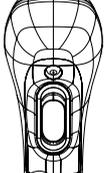
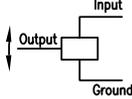
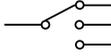
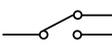
DHRCJ – Fitting

Model code Position 27	Description	Diagram
X	No fitting	
A	G1/4 x UNF 9/16 flat face sealing With filter for P port	
B	G3/8 x UNF 9/16 flat face sealing With filter for P port	
C	G3/8 x UNF 11/16 flat face sealing With filter for P port	
D	G1/4 x UNF 9/16 flat face sealing With filter for P port With 2,4 port orifice Ø1.2[0.047]	
E	G3/8 x UNF 9/16 flat face sealing With filter for P port With 2,4 port orifice Ø1.2[0.047]	

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

DHRCJ – Switches specification

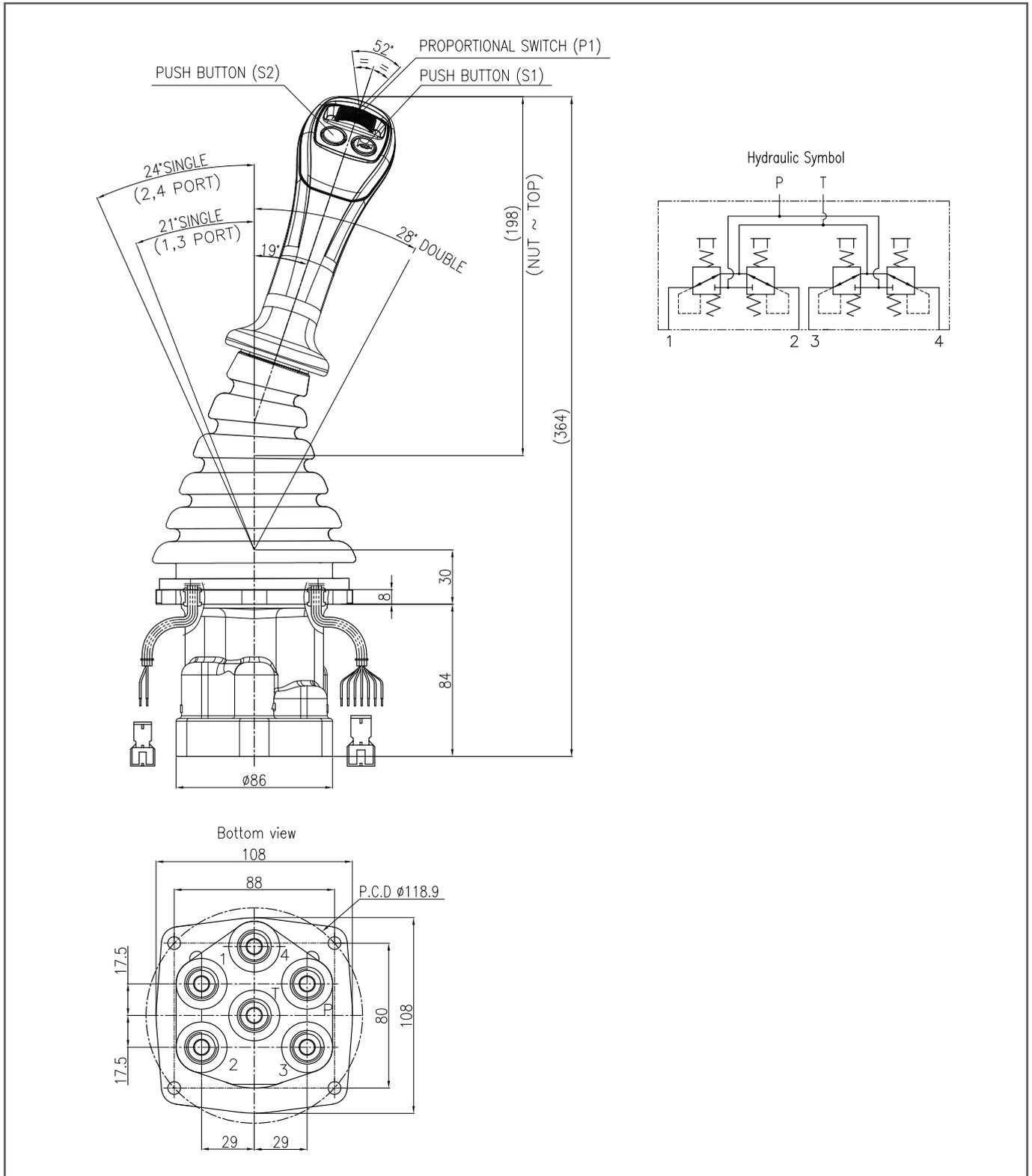
	Push button					
	A grip	B grip	C grip	D/E grip	D/E grip rear button	E grip rear big button
Pictures						
Schematic						
Mechanical	Spring return	Spring return	Spring return	Spring return	Spring return	Spring return
Operating environment	-25°C ~ +85°C 90%RH	-25°C ~ +85°C 90%RH	-25°C ~ +85°C 90%RH	-25°C ~ +85°C 90%RH	-25°C ~ +85°C 90%RH	-25°C ~ +85°C 90%RH
Electrical	AC 125V 5A	AC 125V 5A	AC 125V 5A	AC 125V 5A AC 125V 3A(IP69K)	AC 125V 5A AC 125V 3A(IP67)	AC 125V 5A AC 125V 3A(IP67)
IP	IP40	IP40	IP40	IP40/IP69K	IP40/IP67	IP40/IP67
Life cycle	3,000,000	3,000,000	3,000,000	3,000,000 5,000,000(IP69K)	3,000,000 5,000,000(IP67)	3,000,000 5,000,000(IP67)
Other spec.	-	-	-	IP40 is rotatable IP69K is only 180 degree rotatable	-	-

	Roller				FNR	FR
	Convex	Concave	Convex With IP	Concave With IP		
Pictures						
Schematic						
Mechanical	±26° Spring return	±26° Spring return	±26° Spring return	±26° Spring return	3 position detent	2 position detent
Operating temperature	-40°C ~ +85°C 95%RH	-40°C ~ +85°C 95%RH	-40°C ~ +85°C 95%RH	-40°C ~ +85°C 95%RH	-30°C ~ +85°C 90%RH	-30°C ~ +85°C 90%RH
Electrical	Max 5V	Max 5V	Max 5V	Max 5V	AC 125V 3A	AC 125V 3A
IP	IP40	IP40	IP69K	IP69K	IP40	IP40
Life cycle	3,000,000	3,000,000	3,000,000	3,000,000	50,000	50,000
Other spec.	Rotatable	Rotatable	Only 180 degree rotatable	Only 180 degree rotatable	-	-

DHRCJ - Danfoss Hydraulic Remote - Control Joystick

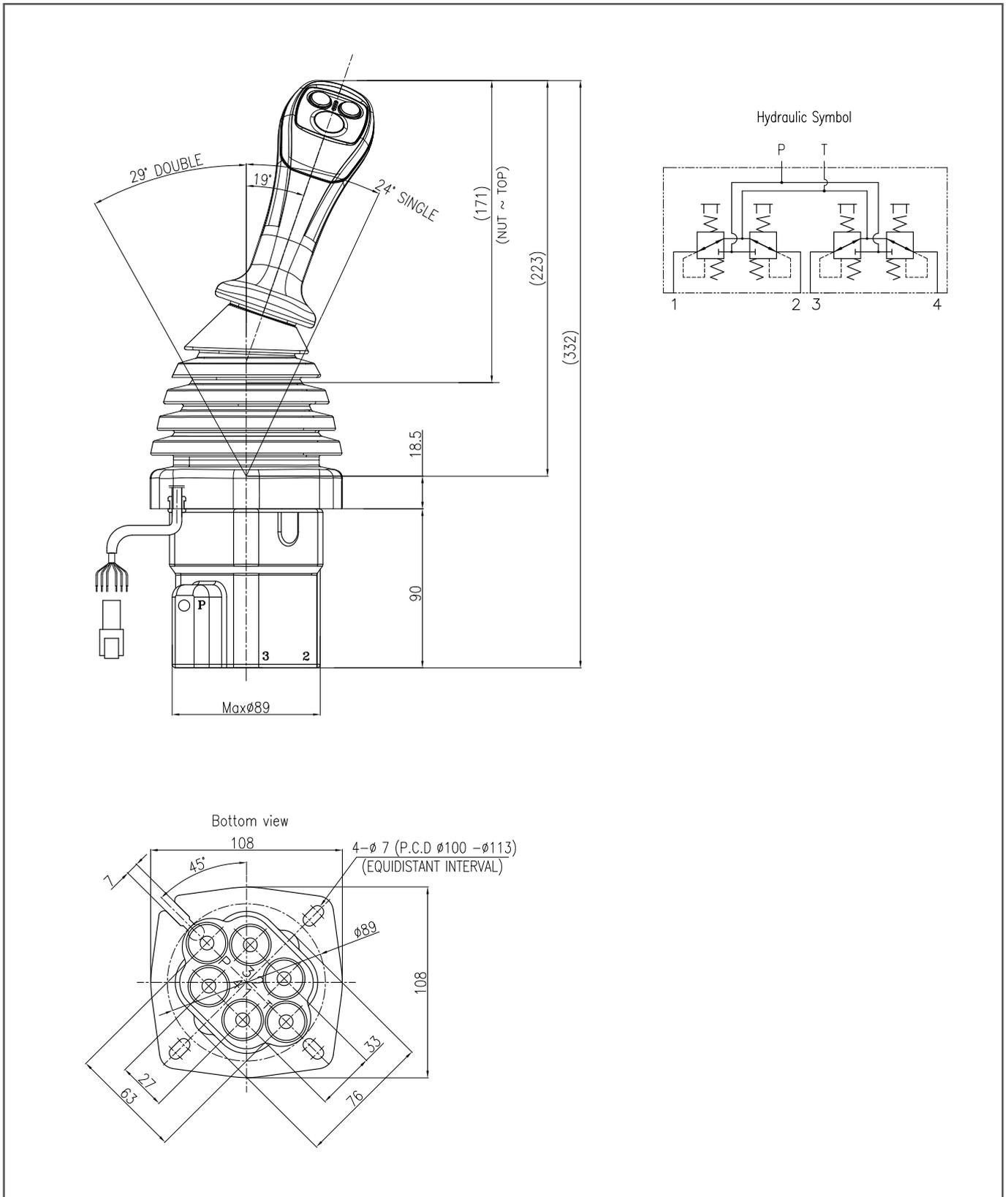
Dimension Reference

Standard body with D type grip



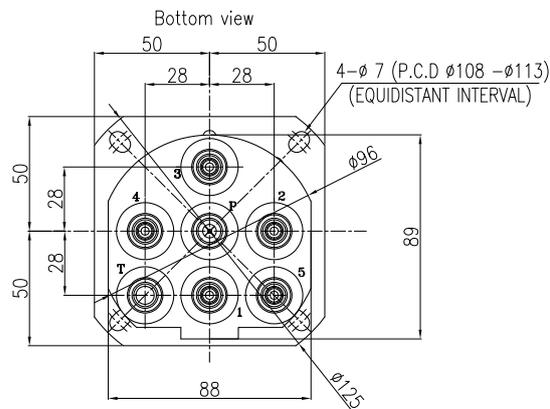
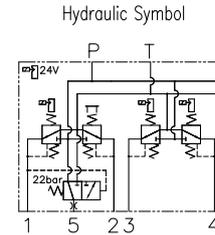
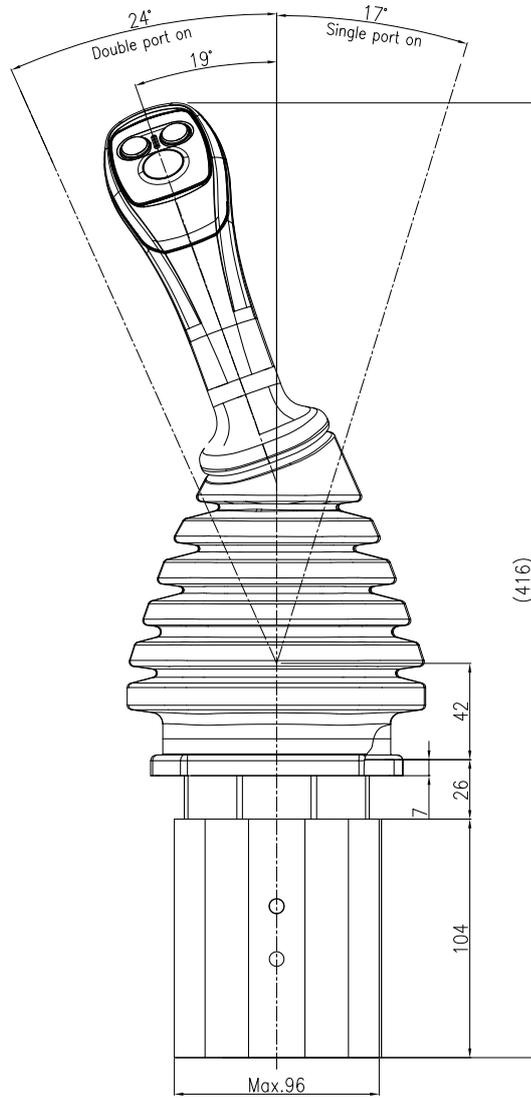
DHRCJ - Danfoss Hydraulic Remote - Control Joystick

Small body with D type grip



DHRCJ - Danfoss Hydraulic Remote - Control Joystick

Mega body with D type grip



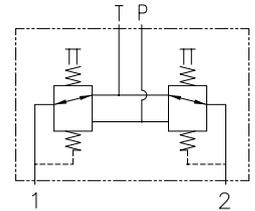
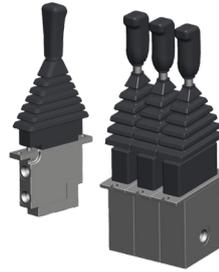
DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

Model Code

Description

The DHRCD series is a single function valve, typically used to control a dozer or similar single function. Based on proportional pressure reducing concept, DHRCD are fed a constant input pressure, from which they create reduced output pressures that vary proportionally with lever or pedal stroke.

DHRCD series provide single or sectional for your choice and options for bodies, grips, output pressure and so on.



Functional Symbol

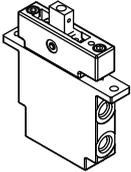
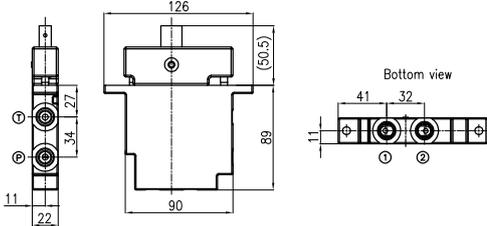
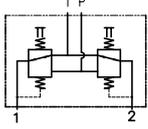
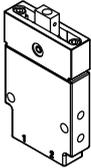
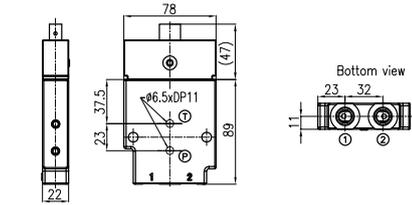
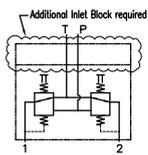
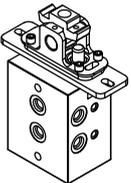
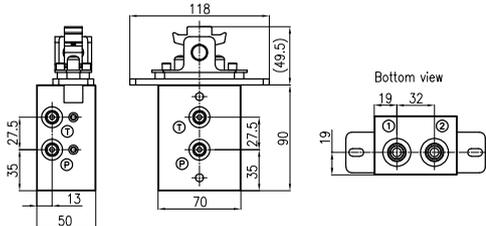
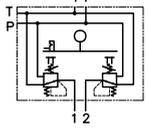
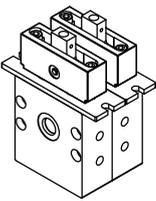
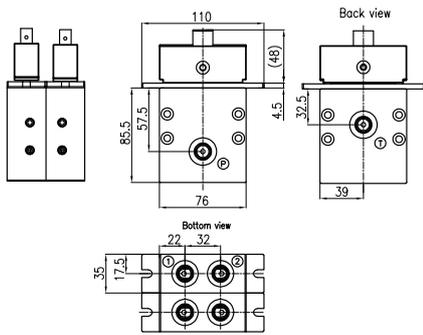
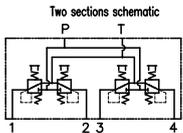
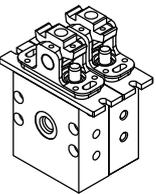
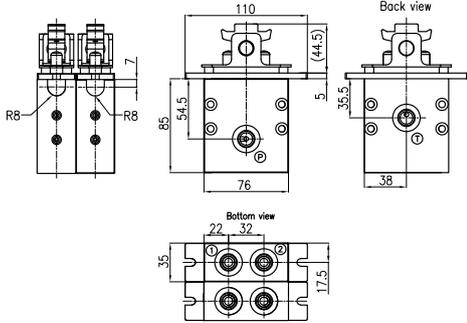
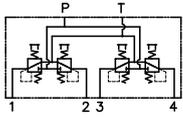
DHRCD	4	2	1	0	3	3	0	XX	X	A26	A26	00	00	00	00	00	00	00	A	0	00	0	A	
1,2,3,4,5	6	7	8	9	10	11	12	13,14	15	16,17,18	19,20,21	22,23,24	25,26,27	28,29,30	31,32,33	34,35,36	37,38,39	40,41,42	43,44,45	46	47	48,49	50	51

Rules						1.2.3.4.5	D-HRC Type
Body type						6	DHRCD Danfoss Hydraulic Remote Controls Dozer Joystick
1	2	3	4	5	6	Basic configuration and body type	
.						1	Single standard
	.					2	Single with extra inlet block
		.				3	Single detent
			.			4	Sectional type bandwidth 35[1.378]
				.		5	Sectional type bandwidth 35 with harness hole
					.	6	Sectional type bandwidth 45[1.771]
						7 Section quantity	
.	.	.				1	1 section
			.	.	.	2	2 sections
			.	.	.	3	3 sections
			.	.	.	4	4 sections
			.	.	.	5	5 sections
						8 Port thread	
.	1	BSPP G1/4 O-ring sealing
.	2	BSPP G1/4 (ISO 1179-1) Flat sealing
.	3	UNF 9/16 (ISO 11926-1) O-ring sealing
						9 Installation	
.	0	Standard
.						1	112[4.409] x 2-7[0.275] hole on top for 1 body
.						2	112[4.409] x 2-8.5[0.334] hole on top for 1 body
.						3	77[3.031]x2-7[0.275] hole on middle for 1 body
.						4	112[4.409]x2-7[0.275] hole on top & 77[3.031]x2-7[0.275] hole on middle for 1 body
.						5	100[3.937]x2-8.5[0.334] hole on top & 64[2.519]x2-8.3[0.326] hole on middle for 1 body
.						6	112[4.409]x2-7[0.275] slot on top for 1 body
						10 Lever and Bar options	
.	0	Without lever and bar
.	.					1	A type lever with A type bar
.	.					2	A type bar only
.	3	B type lever with B type bar
.	4	B type bar only
.	.					5	C type bar only 30 degree to the left side from P,T port
.	.					6	C type bar only 30 degree to the right side from P,T port
.	.					7	D type bar only
.	8	G type lever with G type bar 6degree
.	.					9	B type lever with E type bar 10degree to the left side from P,T port
.	A	G type bar only 6degree
.	B	F type bar only 30degree
						11 Boots options	
.	0	No boots
.	.					1	Standard grey with A type lever and bar, C type bar, D type bar
.	.					2	Standard black with A type lever and bar, C type bar, D type bar
.	3	Standard long black with B type lever and bar
.	4	Standard black with G type lever and bar
.	5	Standard black with F type bar

DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

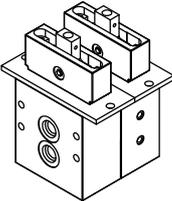
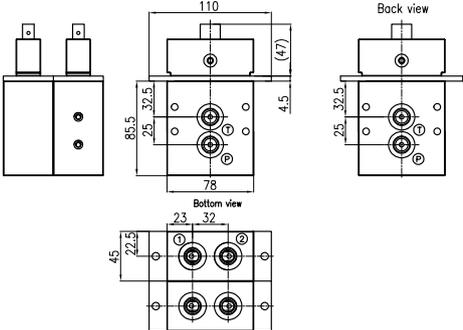
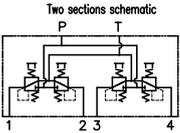
Model Code Explain

DHRCD – Body options

Model code position 6	Description	3D diagram	2D diagram	Schematic
1	Single standard		 <p>Dimensions: 126, 50.5, 89, 90, 11, 22, 27, 34, 41, 32, 11.</p>	
2	Single with extra inlet block		 <p>Dimensions: 78, 47, 89, 23, 37.5, 1, 2, 23, 32, 11.</p>	
3	Single detent		 <p>Dimensions: 118, 49.5, 90, 70, 35, 27.5, 19, 32, 19, 19.</p>	
4	Sectional type bandwidth 35[1.378]		 <p>Dimensions: 110, 48, 85.5, 57.5, 4.5, 39.5, 76, 39, 35, 22, 32, 17.5, 35.</p>	
5	Sectional type bandwidth 35 with harness hole		 <p>Dimensions: 110, 44.5, 85, 54.5, 5, 35.5, 76, 38, 35, 22, 32, 17.5, 35.</p>	

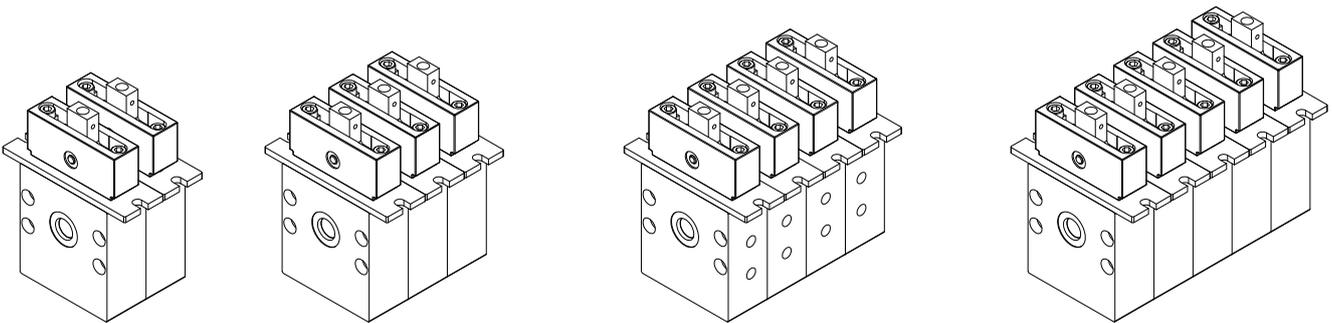
DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Body options

Model code position 6	Description	3D diagram	2D diagram	Schematic
6	Sectional type bandwidth 45[1.771]			

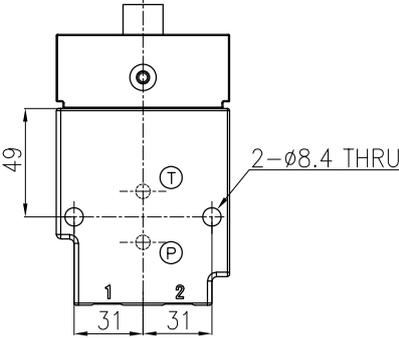
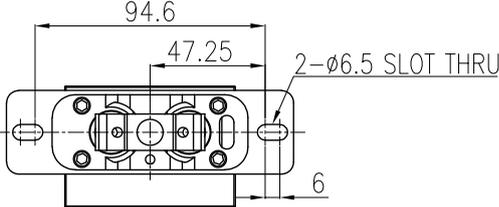
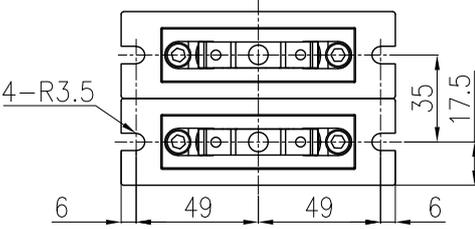
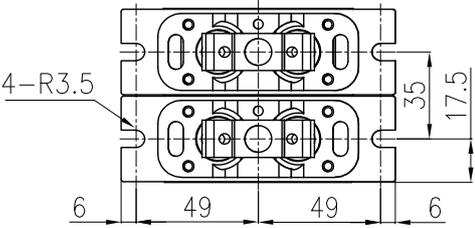
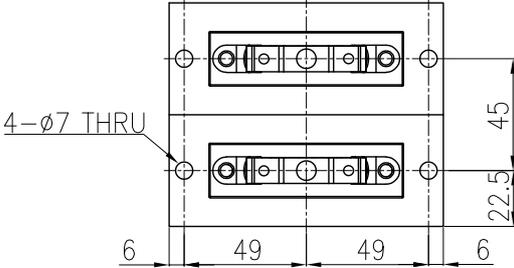
DHRCD – Section options

If you select sectional body. DHRCD provide section quantity selection from 2 to maximum 5. Below shows appearance example according different choice.



DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Installation

Model code position 9	Description	Suitable body (Model code position 6)	Diagram
		2	
		3	
0	Standard	4	
		5	
		6	

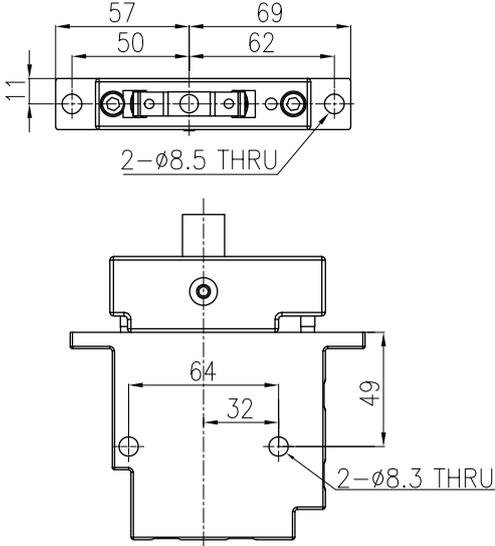
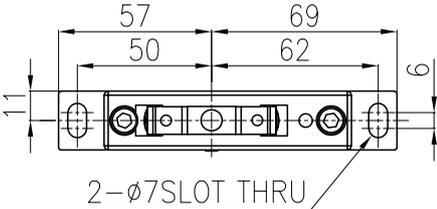
DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Installation

Model code position 9	Description	Suitable body (Model code position 6)	Diagram
1	112[4.409] x 2-7[0.275] hole on top 1 body	1	<p>Technical drawing of a hydraulic remote control joystick. Dimensions shown: 57 (total width), 69 (total length), 50 (width to center of first hole), 62 (width to center of second hole), 11 (height), and 2-ø7 THRU (two 7mm diameter through holes).</p>
2	112[4.409] x 2-8.5[0.334] hole on top 1 body	1	<p>Technical drawing of a hydraulic remote control joystick. Dimensions shown: 57 (total width), 69 (total length), 50 (width to center of first hole), 62 (width to center of second hole), 11 (height), and 2-ø8.5 THRU (two 8.5mm diameter through holes).</p>
3	77[3.031]x2-7[0.275] hole on middle 1 body	1	<p>Technical drawing of a hydraulic remote control joystick. Dimensions shown: 77 (width), 44.5 (width to center of hole), 44 (height), and 2-ø7 THRU (two 7mm diameter through holes).</p>
4	112[4.409]x2-7[0.275] hole on top & 77[3.031] x2-7[0.275] hole on middle 1 body	1	<p>Technical drawing of a hydraulic remote control joystick. Dimensions shown: 57 (total width), 69 (total length), 50 (width to center of first hole), 62 (width to center of second hole), 11 (height), 77 (width), 44.5 (width to center of hole), 44 (height), and 2-ø7 THRU (two 7mm diameter through holes).</p>

DHRC - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRC - Installation

Model code position 9	Description	Suitable body (Model code position 6)	Diagram
5	100[3.937]x2-8.5[0.334] hole on top & 64[2.519] x2-8.3[0.326] hole on middle 1 body	1	 <p>The diagram shows two views of a hydraulic remote control body. The top view is a rectangular block with a total width of 57 and a total height of 11. It features two circular holes, each with a diameter of 8.5, spaced 50 units apart. The distance from the center of the first hole to the right edge is 62, and the distance from the center of the second hole to the right edge is 69. The bottom view shows a more complex profile with a total width of 64 and a total height of 49. It features two circular holes, each with a diameter of 8.3, spaced 32 units apart. The distance from the center of the first hole to the left edge is 32, and the distance from the center of the second hole to the right edge is 49.</p>
6	112[4.409]x2-7[0.275] slot on top 1 body	1	 <p>The diagram shows a top view of a hydraulic remote control body with a total width of 57 and a total height of 6. It features two rectangular slots, each with a width of 7, spaced 50 units apart. The distance from the center of the first slot to the right edge is 62, and the distance from the center of the second slot to the right edge is 69.</p>

DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Lever and bar options

Model code position 10	Description	Diagram
0	Without lever and bar	
1	A type lever with A type bar	
2	A type bar only	
3	B type lever with B type bar	
4	B type bar only	
5	C type bar only 30 degree to the left side from P,T port	
6	C type bar only 30 degree to the right side from P,T port	

Model code position 10	Description	Diagram
7	D type bar only	
8	G type lever with G type bar 6degree	
9	B type lever with E type bar 10degree to the left side from P,T port	
A	G type bar only 6degree	
B	F type bar only 30degree	

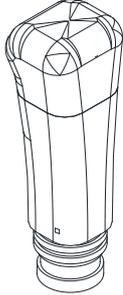
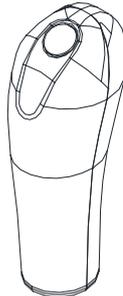
DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Boots

Model code position 11	Description	Diagram
0	No boots	
1	Standard grey with A type lever and bar, C type bar, D type bar	
2	Standard black with A type lever and bar, C type bar, D type bar	
3	Standard long black with B type lever and bar	
4	Standard black with G type lever and bar	
5	Standard black with F type bar	

DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Switch option

Model code position 12	Description	Diagram
1	Front one button for A type lever	
2	Front one button for G type lever	

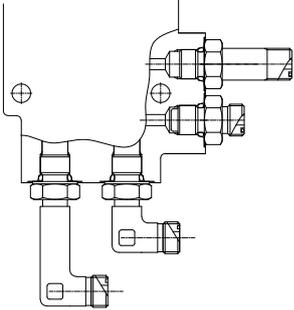
DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

DHRCD – Hose fitting

Model code position 15	Description	Diagram
A	G1/4 x UNF 9/16 flat face sealing with filter for P port	<p>Technical diagrams for model A. The P port diagram shows a total length of 32.5, with a 14.7 section for the G 1/4 connection and a 9.8 section for the UNF 9/16 connection. The hex nut size is HEX 19. The Other port diagram shows a total length of 28, with an 11 section for the G 1/4 connection and a 9.8 section for the UNF 9/16 connection. The hex nut size is HEX 19.</p>
B	G3/8 x UNF 9/16 flat face sealing with filter for P port	<p>Technical diagrams for model B. The P port diagram shows a total length of 32.5, with a 14.7 section for the G 3/8 connection and a 9.8 section for the UNF 9/16 connection. The hex nut size is HEX 22. The Other port diagram shows a total length of 29, with an 11 section for the G 3/8 connection and a 9.8 section for the UNF 9/16 connection. The hex nut size is HEX 22.</p>
C	G3/8 x UNF 11/16 flat face sealing with filter for P port	<p>Technical diagrams for model C. The P port diagram shows a total length of 34, with a 14.7 section for the G 3/8 connection and an 11.2 section for the UNF 11/16 connection. The hex nut size is HEX 22. The Other port diagram shows a total length of 30, with an 11 section for the G 3/8 connection and a 9.8 section for the UNF 11/16 connection. The hex nut size is HEX 22.</p>
D	Hose fitting kit D(UNF 9/16), P-filter T-long 1-elbow 45degree 2-elbow 45degree	<p>Isometric diagram of hose fitting kit D, showing a P-filter T-long, one 45-degree elbow, and two 45-degree elbows.</p>
E	Hose fitting kit E(UNF 9/16), P-filter T-long 1-elbow 90degree long 2-elbow 90degree	<p>Isometric diagram of hose fitting kit E, showing a P-filter T-long, one 90-degree long elbow, and two 90-degree elbows.</p>

DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

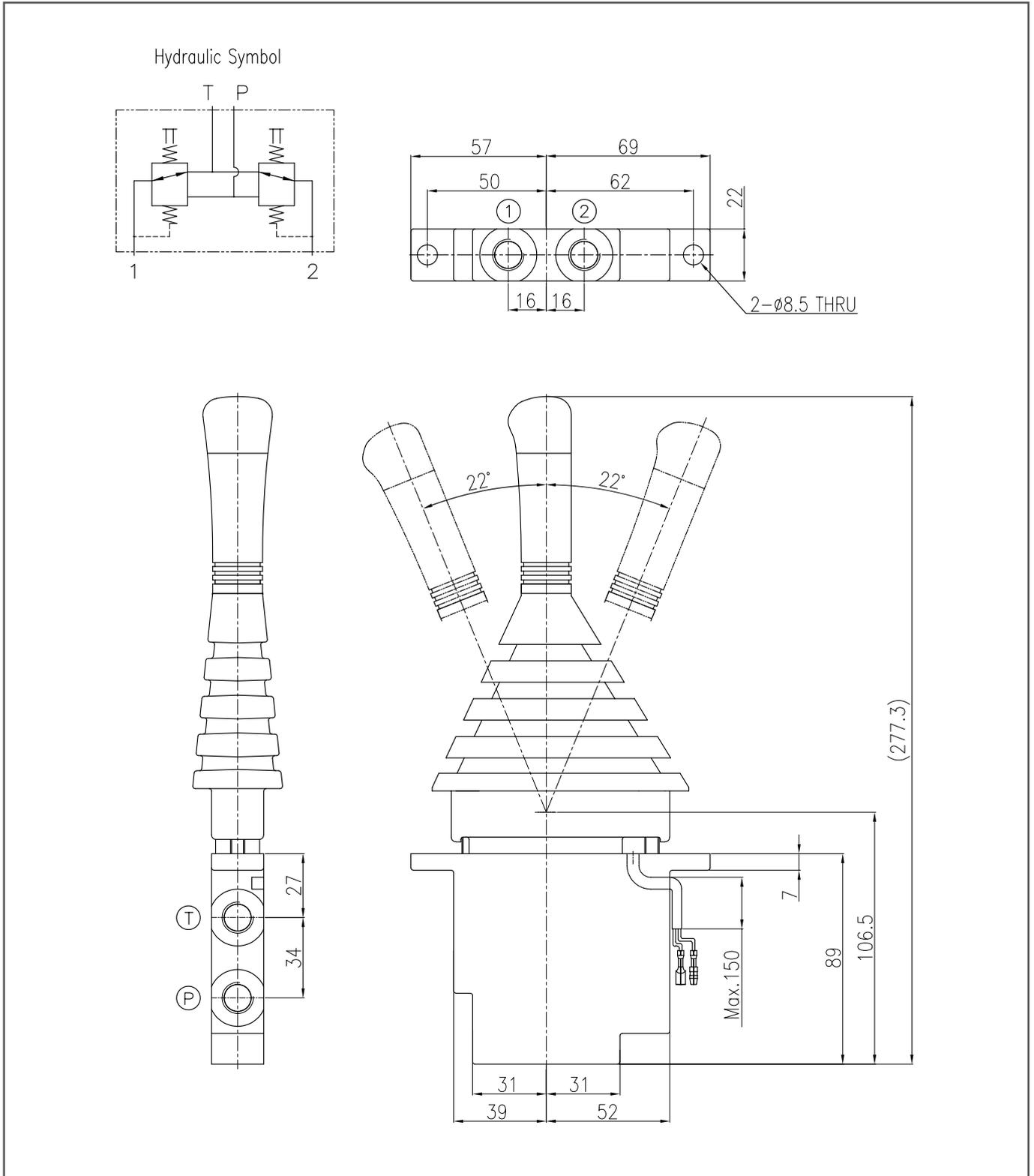
DHRCD – Hose fitting

Model code position 15	Description	Diagram
F	Hose fitting kit F(UNF 9/16), P-filter T-extra long 1-elbow 90degree long 2-elbow 90degree	

DHRC - Danfoss Hydraulic Remote - Control Dozer Joystick

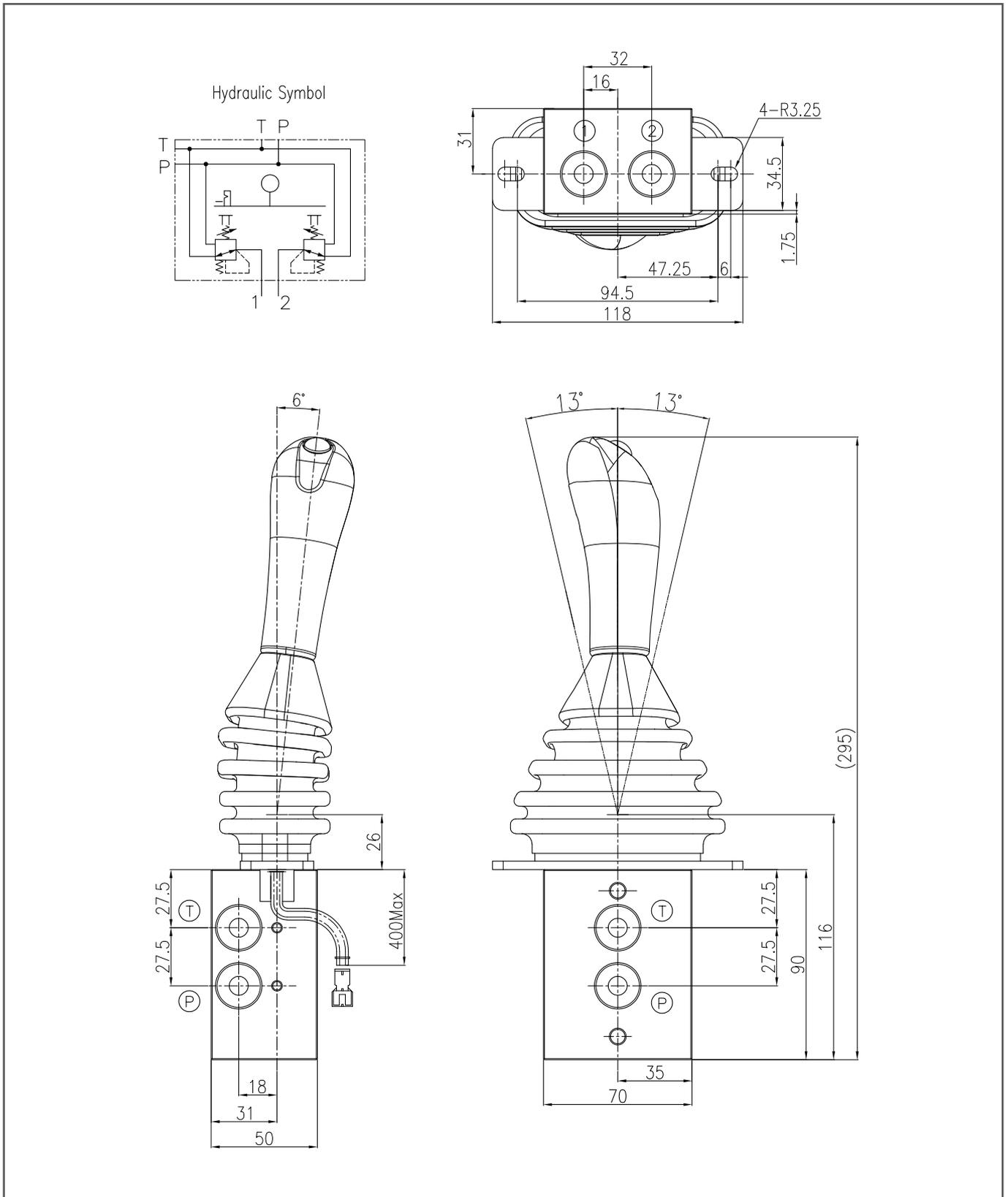
Dimension Reference

Single standard



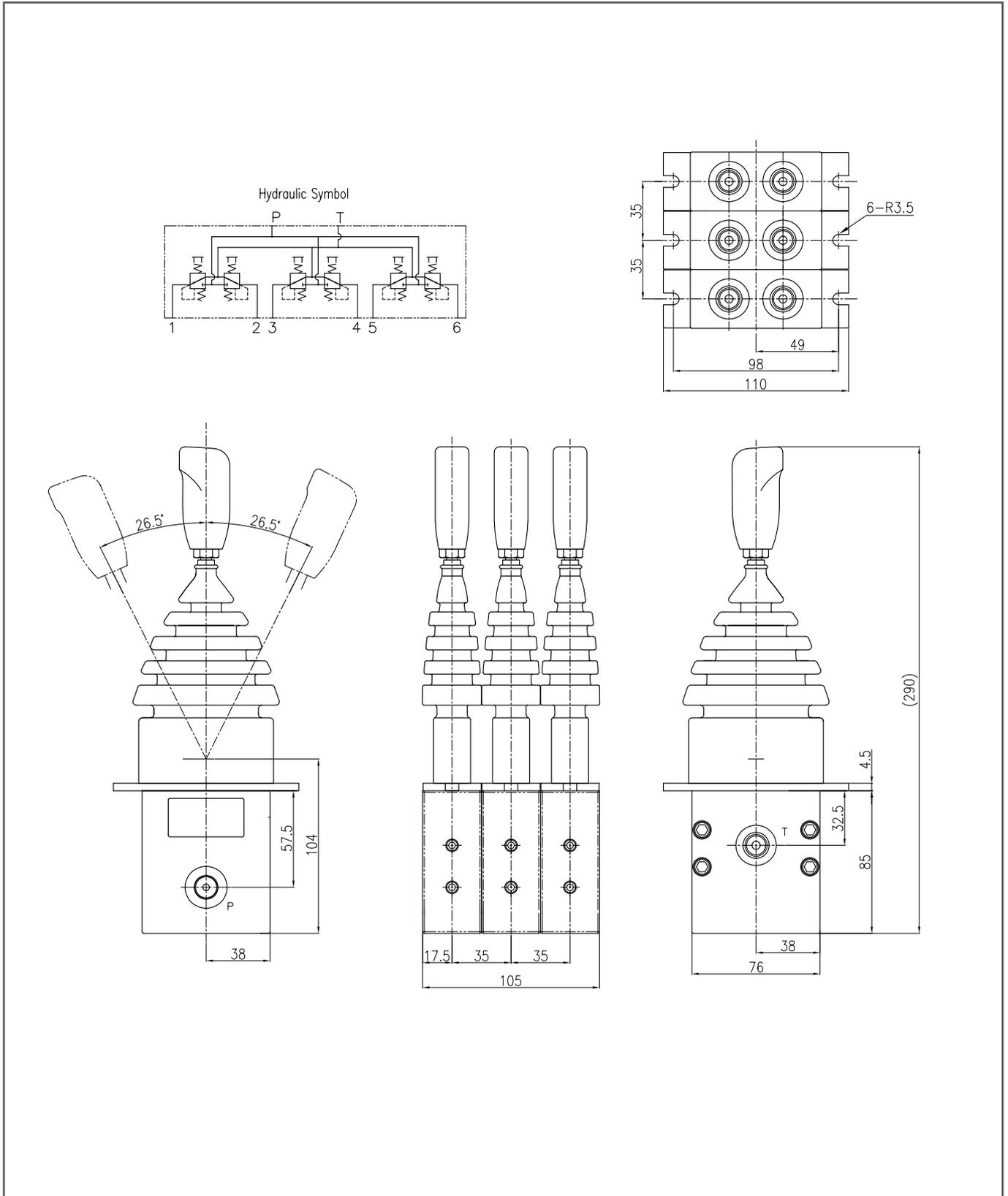
DHRCD - Danfoss Hydraulic Remote - Control Dozer Joystick

Single detent



DHRC - Danfoss Hydraulic Remote - Control Dozer Joystick

Sectional



DHRCP - Danfoss Hydraulic Remote - Control Pedal

DHRCP	2	0	1	1	1	0	1	A01	A01	B	00	0	0	A
1.2.3.4.5	6	7	8	9	10	11	12	13.14.15	16.17.18	19	20.21	22	23	24

1	2	3	4	5	6	7	8								
.		16.17.18	Output pressure port 3 4					
.		000	Not applicable					
.		A##	A type pressure curve, see curve table					
.		B##	B type pressure curve, see curve table					
.		C##	C type pressure curve, see curve table					
.		19	Operating type and torque					
.		A	Spring return with torque 3.90Nm[2.87lbf ft]@starting 5.47Nm[4.03lbf ft]@full stroke exclusive of set spring					
.		B	Spring return with torque 4.55Nm[3.35lbf ft]@starting 6.12Nm[4.52lbf ft]@full stroke exclusive of set spring					
.		C	Spring return with torque 5.02Nm[3.70lbf ft]@starting 8.04Nm[5.93lbf ft]@full stroke exclusive of set spring					
.		D	Spring return with torque 5.94Nm[4.38lbf ft]@starting 8.14Nm[6.00lbf ft]@full stroke exclusive of set spring					
.		E	Spring return with torque 6.99Nm[5.15lbf ft]@starting 12.12Nm[8.94lbf ft]@full stroke exclusive of set spring					
.		F	Spring return with torque 0.77Nm[0.56lbf ft]@starting 1.13Nm[0.83lbf ft]@full stroke exclusive of set spring					
.		G	Spring return with torque 2.97Nm[2.19lbf ft]@starting 5.51Nm[4.06lbf ft]@full stroke exclusive of set spring					
.		H	Spring return with torque 0.16Nm[0.19lbf ft]@starting 0.33Nm[0.24lbf ft]@full stroke exclusive of set spring					
.		I	Spring return with torque 0.68Nm[0.50lbf ft]@starting 1.12Nm[0.82lbf ft]@full stroke exclusive of set spring					
.		J	Spring return with torque 4.34Nm[3.20lbf ft]@starting 8.32Nm[6.13lbf ft]@full stroke exclusive of set spring					
.		K	Spring return with torque 2.07Nm[1.52lbf ft]@starting 3.21Nm[2.36lbf ft]@full stroke exclusive of set spring					
.		L	Spring return with torque 0.99Nm[0.73lbf ft]@starting 1.52Nm[1.12lbf ft]@full stroke exclusive of set spring					
.		20.21	Special features					
.		00	No					
.		22	Body painting					
.		0	No					
.		1	Black					
.		23	Identification					
.		0	No					
.		TBD	Customized identification can be discuss					
.		24	Design code					
.		A	First Design					

Note:

1. "##" means No. chosen from Pressure Control Curves table.
2. "." means available options.

DHRCP - Danfoss Hydraulic Remote - Control Pedal

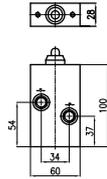
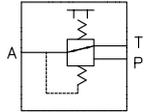
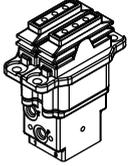
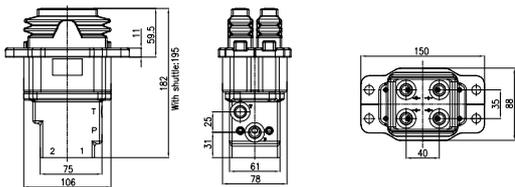
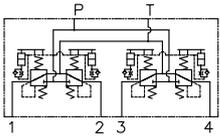
Model Code Explain

DHRCP – Body options

Model code position 6	Description	3D diagram	2D diagram	Schematic
1	Damping dual pedal mono type cast iron		<p>Bottom view</p>	
2	Damping dual pedal mono type aluminum alloy		<p>Bottom view</p>	
3	Damping dual pedal split type from top to bottom cast iron		<p>Bottom view</p>	
4	Single pedal cast iron		<p>Bottom view</p>	
5	Single pedal cast iron with additional inlet cover		<p>Bottom view</p>	
6	Single pedal aluminum alloy		<p>Bottom view</p>	

DHRCP - Danfoss Hydraulic Remote - Control Pedal

DHRCP – Body options

Model code position 6	Description	Picture (3d)	Dimension (2d)	Schematic
7	Uni-directional (push only) single pedal cast iron			
8	Damping dual mini pedal with shuttle cast iron	<p>W/o shuttle for refer</p> 	<p>W/o shuttle for refer</p>  <p>Note: For body with shuttle, length increase, detail can refer dimension reference page.</p>	

DHRCP - Danfoss Hydraulic Remote - Control Pedal

DHRCP - installation

Model code position 9	Description	Suitable body (Model code position 6)	Diagram
1	Standard	1	
		2	
		3	
		4,5	
		6	
		8	
2	78[3.070] x 117[4.606] and 3-6[0.236] hole	7	
3	78[3.070] x 117[4.606] and 3-7[0.275] hole	7	

DHRCP - Danfoss Hydraulic Remote - Control Pedal

DHRCP - installation

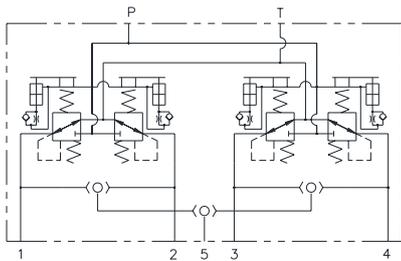
Model code position 9	Description	Suitable body (Model code position 6)	Diagram
4	78[3.070] x 43[1.693] and 3-7[0.275] hole	7	
5	42[1.653] x M6 thread	7	

DHRCP – damping function

Model code position 10	0	1	2	3
Description	No	Standard speed with orifice 0.9[0.035]	Standard speed with orifice 0.7[0.027]	Special orifice 1.7[0.067]
Diagram	N/A			

Damping function provide a feeling of resistance when push the pedal.
 This can avoid a sudden push on the pedal which can lead a quick movement.
 Different orifice can provide different feeling.

DHRCP - Shuttle function



The group of shuttle valves can out put pressure signal on port5, no matter which port is outputting pressure from port 1 to port 4. This is normally applied for alarm function for example travel actuation.

DHRCP - Danfoss Hydraulic Remote - Control Pedal

DHRCP – bellows option

Model code position 11	Description	Suitable body (Model code position 6)	diagram	dimension referenece
0	Standard	1,2,4,5		
		3		
		6		
		7		
		8		
1	No bellows			

DHRCP - Danfoss Hydraulic Remote - Control Pedal

DHRCP – foot plate option

Model code position 12	Description	Diagram
0	No foot plate	
1	Standard double pedal	
2	Wide double pedal	
3	Standard single pedal	
4	Single uni-directional pedal	
5	Wide single uni-directional pedal	

DHRCP - Danfoss Hydraulic Remote - Control Pedal

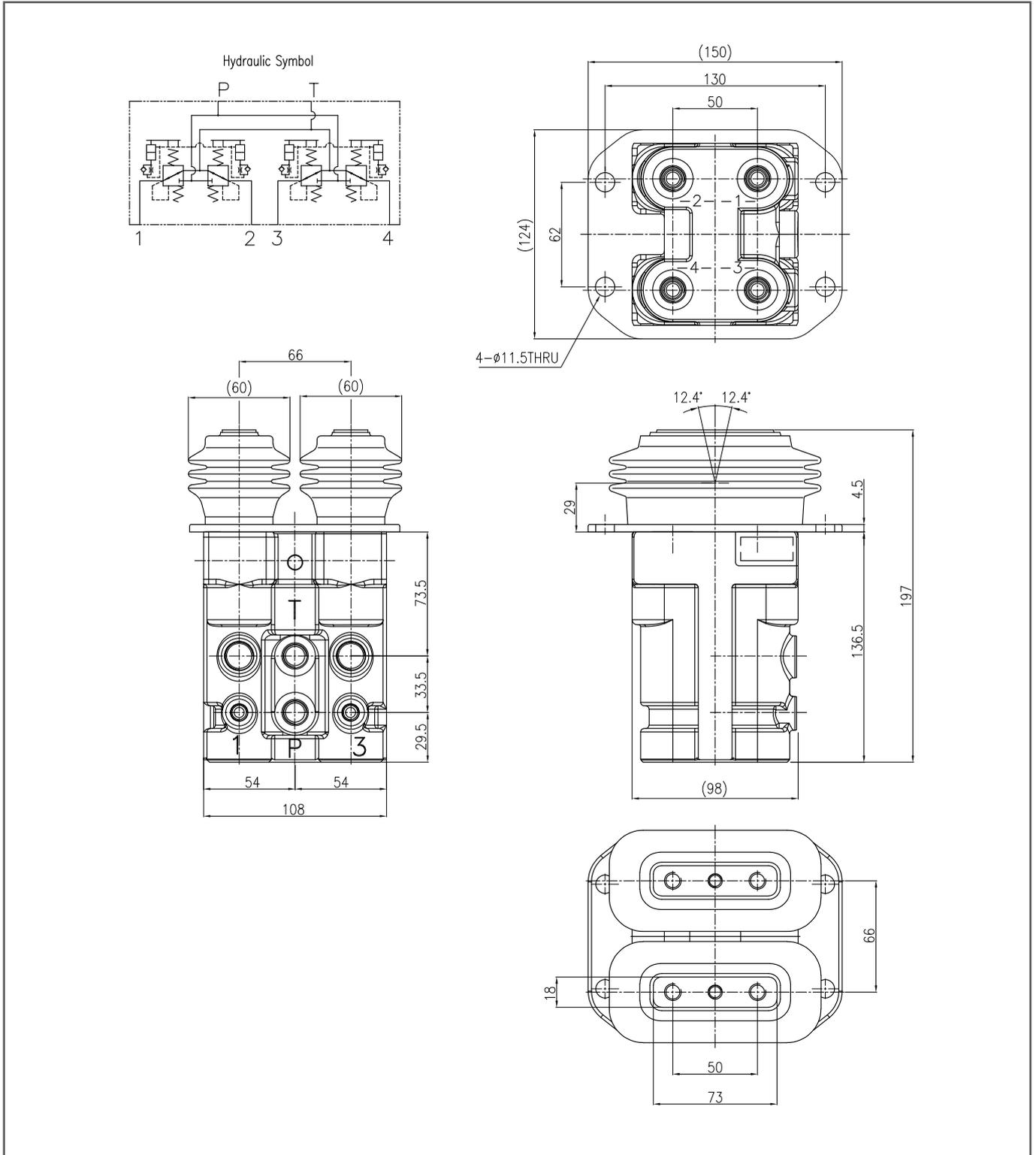
DHRCP – foot plate option

Model code position 12	Description	Diagram
6	Steelplate single pedal without rubber cover	
7	Single uni-directional small pedal	

DHRCP - Danfoss Hydraulic Remote - Control Pedal

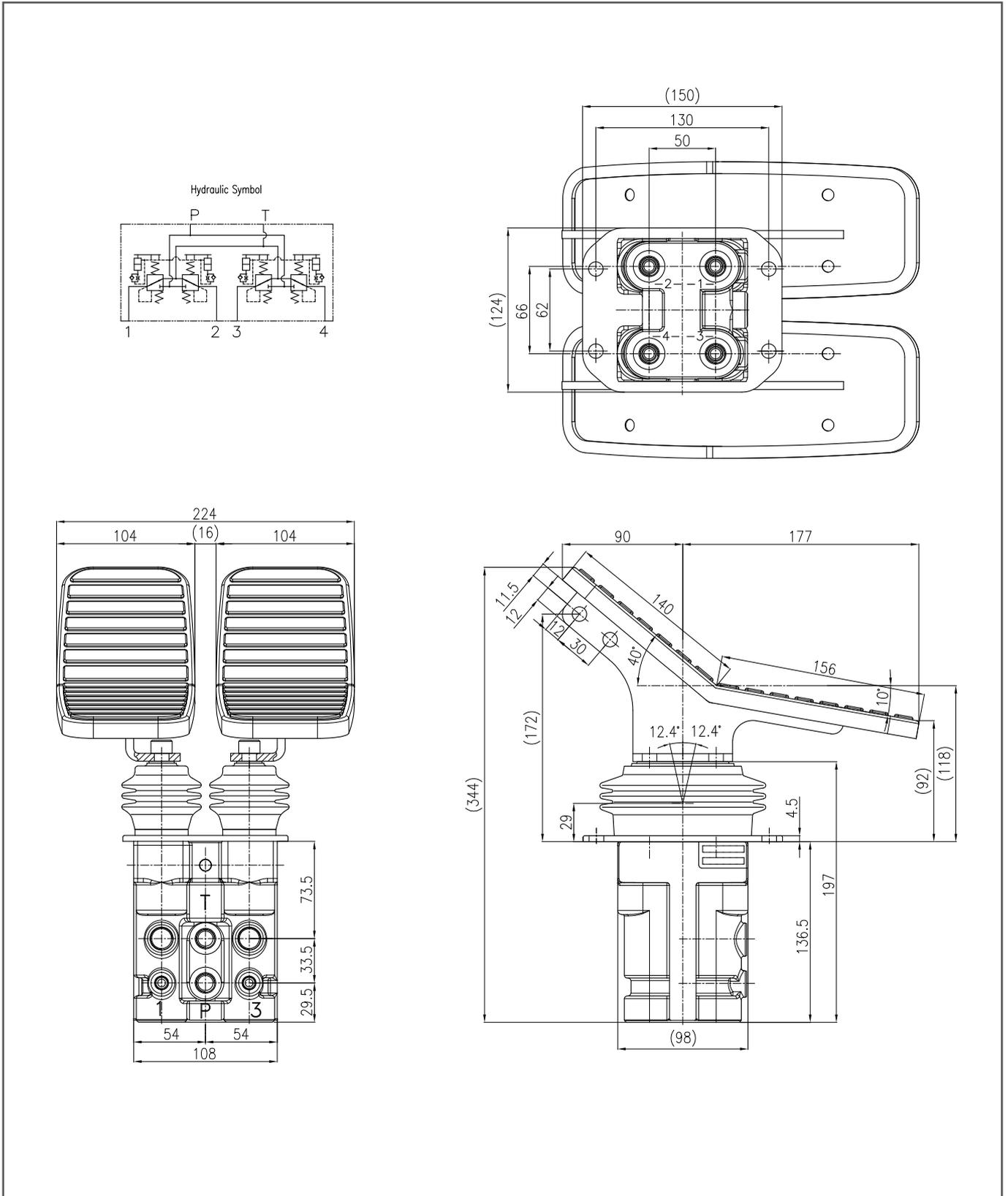
Dimension Reference

Damping dual pedal aluminum without foot plate



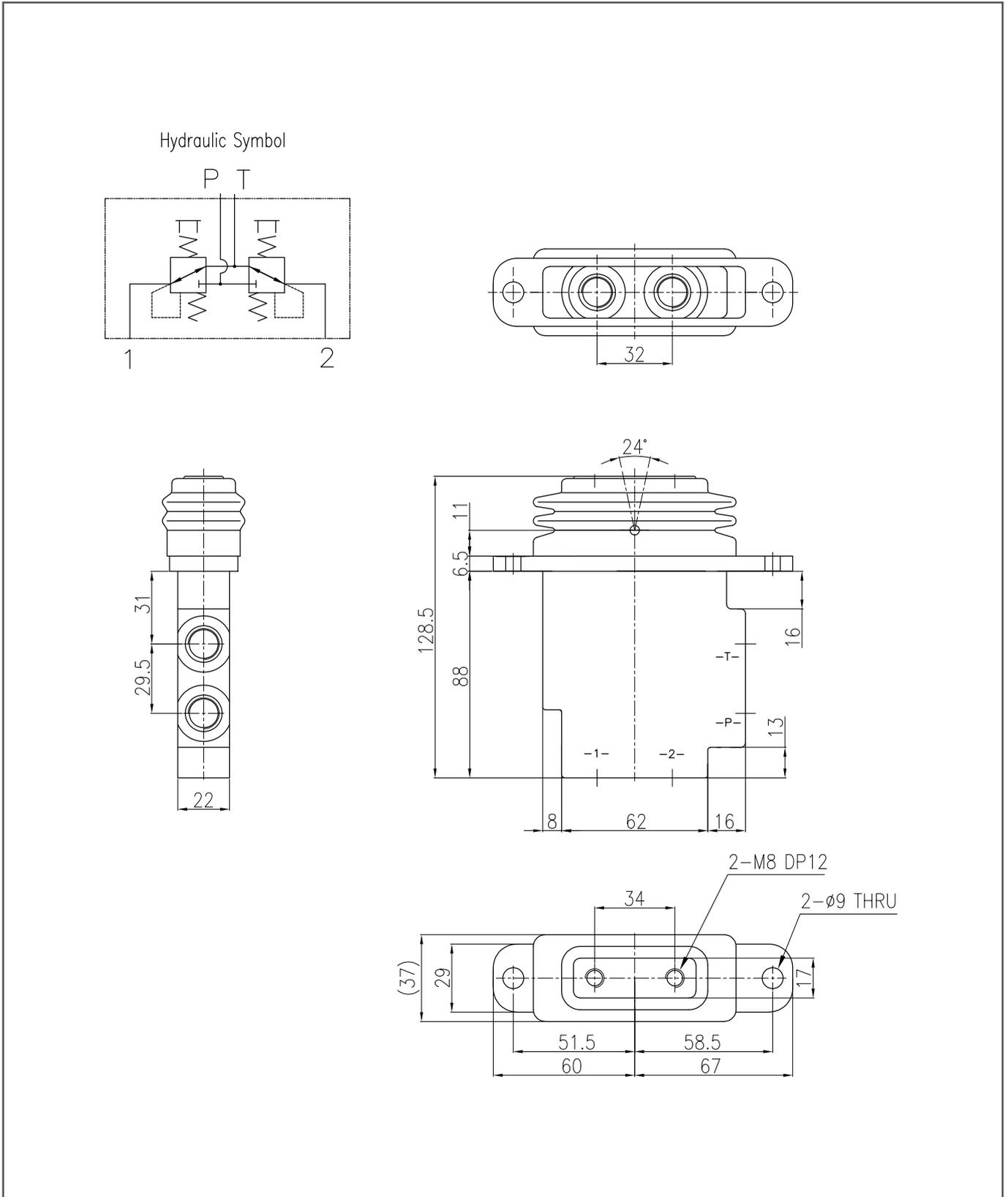
DHRCP - Danfoss Hydraulic Remote - Control Pedal

Damping dual pedal aluminum with foot plate



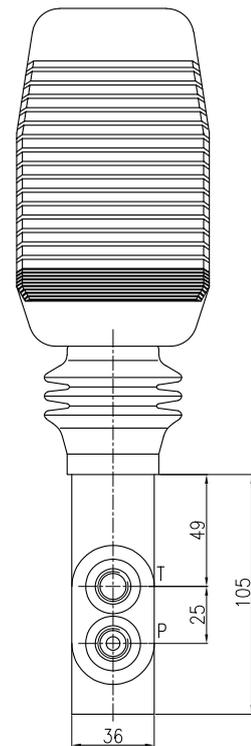
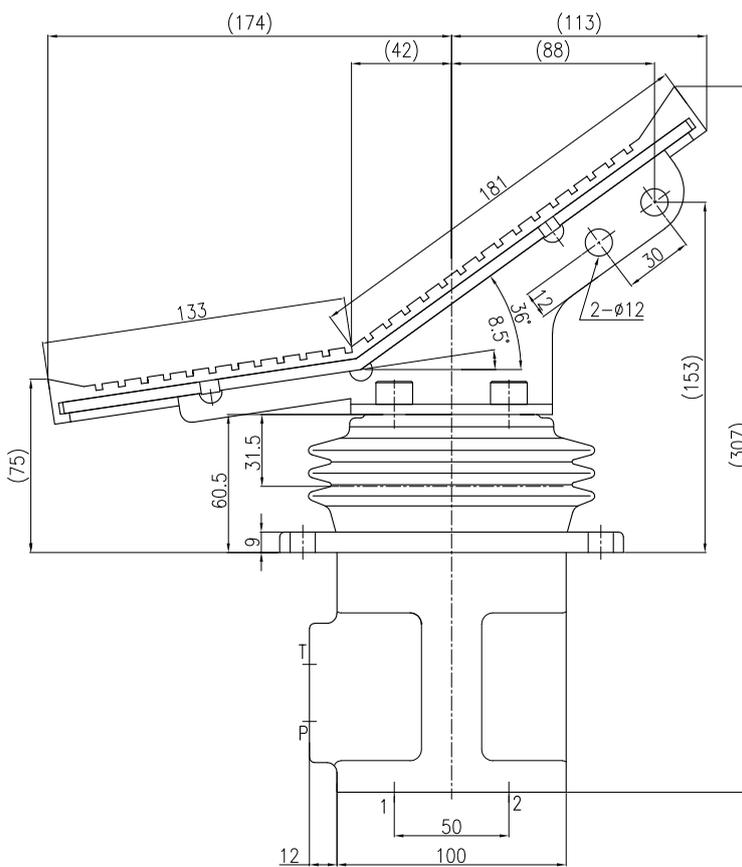
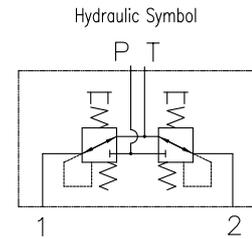
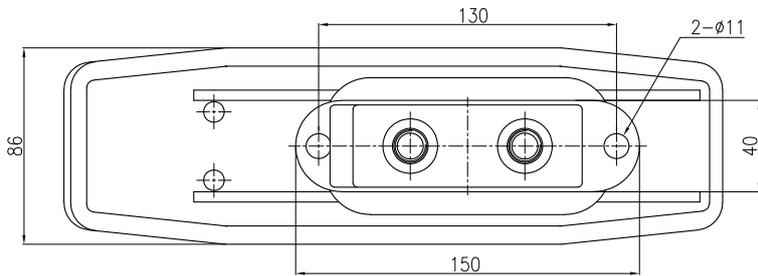
DHRCP - Danfoss Hydraulic Remote - Control Pedal

Single pedal aluminum without foot plate



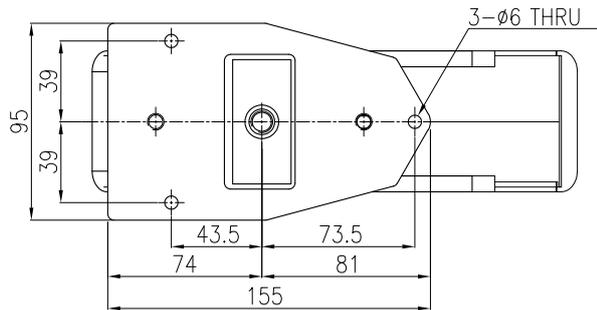
DHRCP - Danfoss Hydraulic Remote - Control Pedal

Single pedal casting iron with foot plate

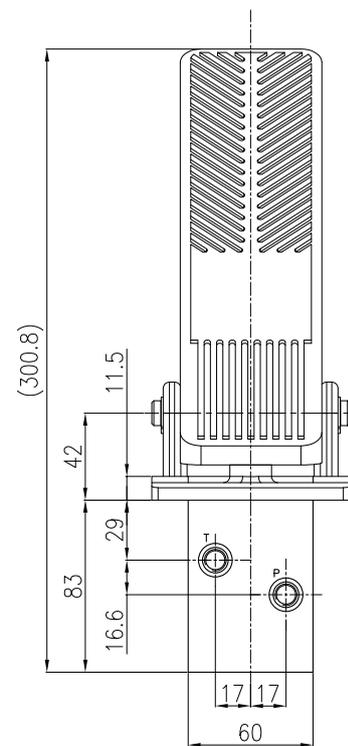
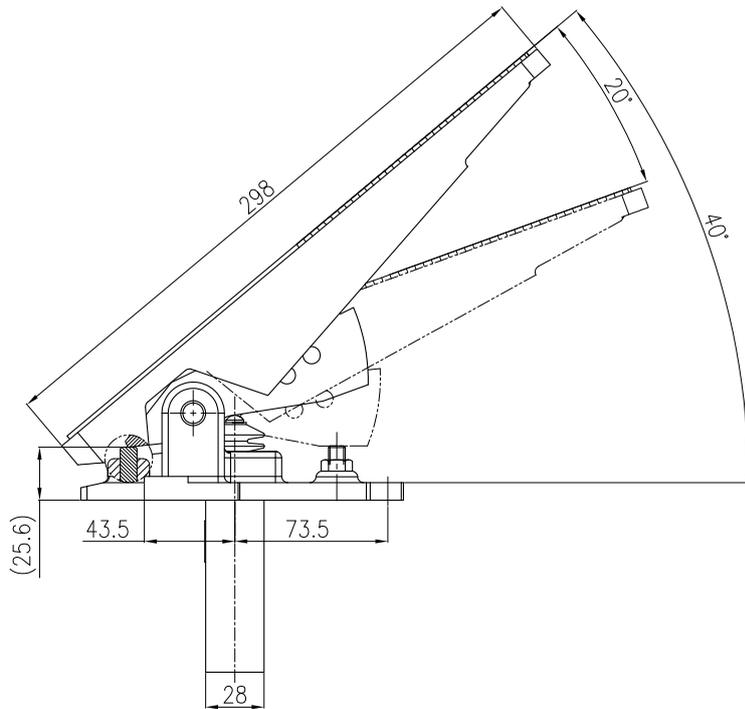
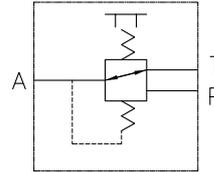


DHRCP - Danfoss Hydraulic Remote - Control Pedal

Push only pedal with foot plate

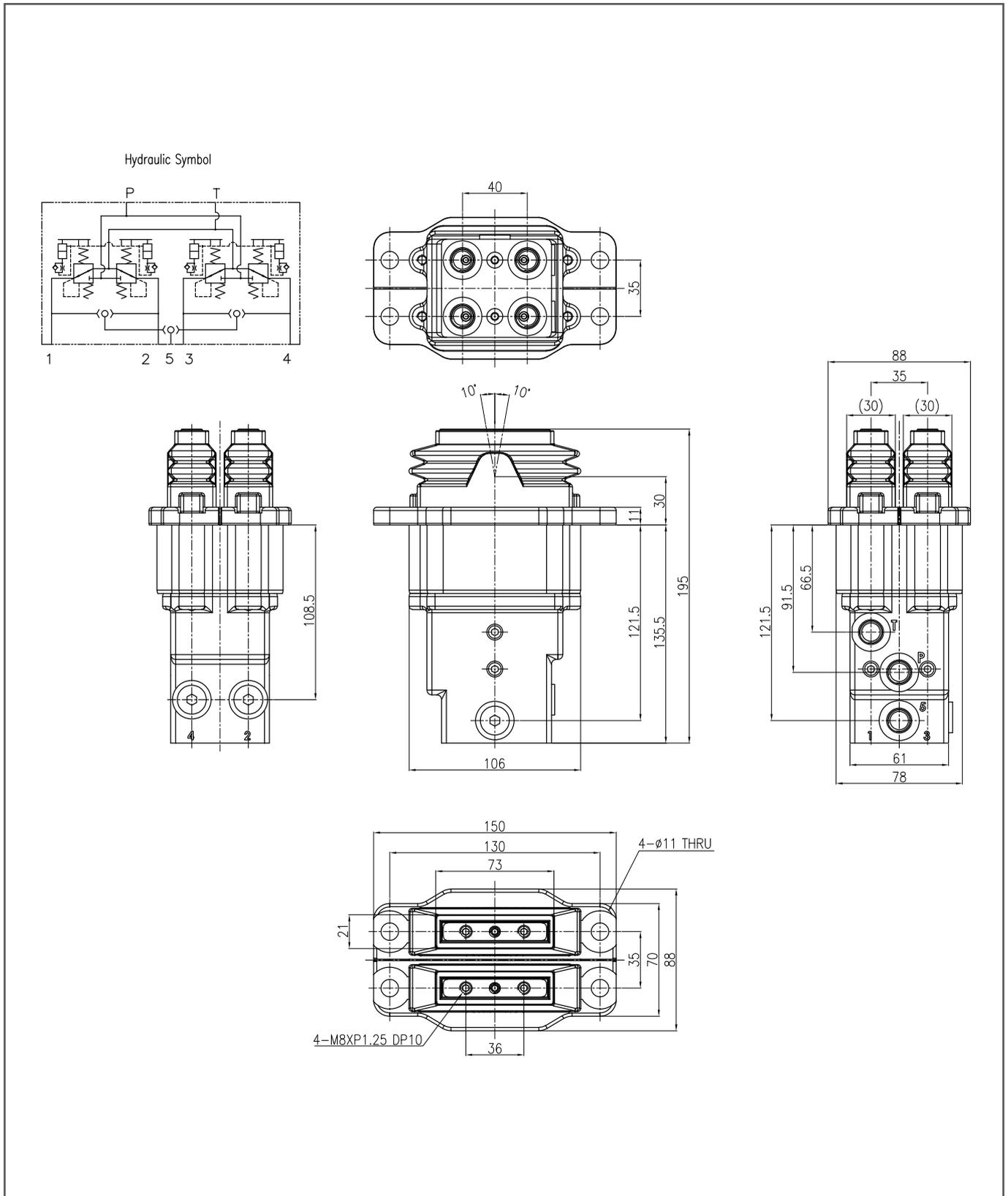


Hydraulic Symbol



DHRCP - Danfoss Hydraulic Remote - Control Pedal

Damping dual mini pedal with shuttle without foot plate



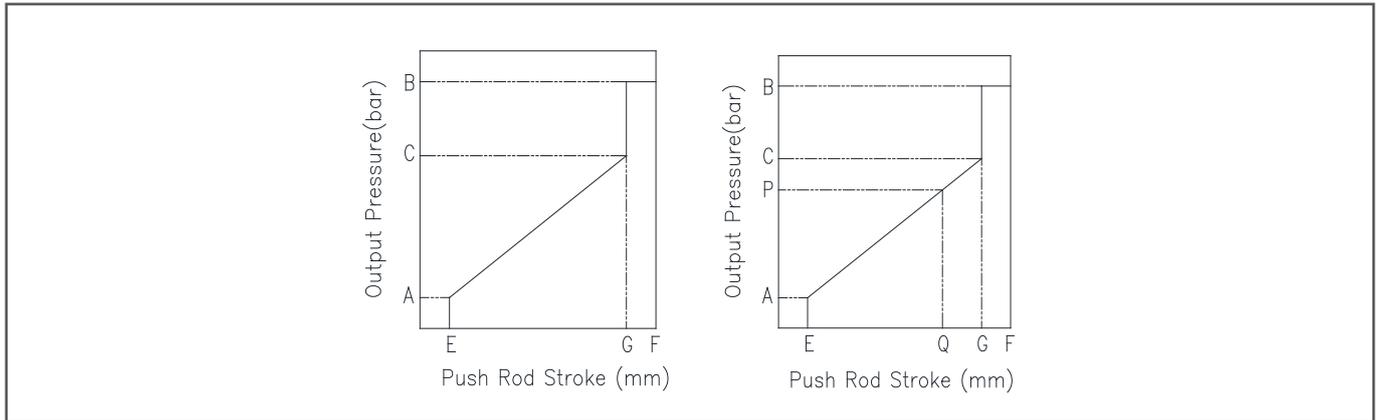
D-HRC Port Dimension

Port size and sealing type	Diagram
BSPP G3/8 O-ring sealing	
BSPP G1/4 O-ring sealing	
BSPP G1/4 flat sealing (ISO 1179-1)	

Port size and sealing type	Diagram
UNF9/16 O-ring sealing (ISO 11926-1)	
BSPT PT1/8	

Pressure Control Curves

A type- Proportional with forced terminal rise

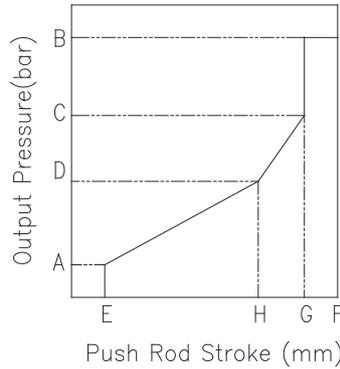


NO	Output pressure					Stroke					Available types and bodies											
	A	B	C	D	P	E	F	G	H	Q	DHRCJ			DHRC		DHRCP						
											1/4/5	2/3	6	1/2/3/4/5/6 (Spool Ø6)	4/5 (Spool Ø5.5)	1/3	2	4/6	6	7	8	
13	5	SP	19			1	7	6.5			.											
01	5	SP	19.5			1	7	6.5			.											
03	5	SP	20.5			1	7	6.5			.	.										
23	7	SP	20.5			1	7	6.5				.										
75	6.5	SP	22			1	7	6.5			.											
65	5.5	SP	22.5			1	7	6.5			.											
50	5	SP	23			1	7	6.5			.											
74	6.5	SP	23			1	7	6.5			.											
14	5	SP	23.5			1	7	6.5			.											
70	5	SP	25			1	7	6.5			.											
18	6.5	SP	25			1	7	6.5			.											
02	6.5	SP	26			1	7	6.5			.											
52	5	SP	27			1	7	6.5			.											
11	5	SP	28			1	7	6.5			.											
25	6.5	SP	28			1	7	6.5			.											
84	7	SP	28			1	7	6.5			.											
60	8	SP	28			1	7	6.5			.											
21	7	SP	29			1	7	6.5			.											
97	5	SP	29.5			1	7	6.5			.											
06	5	SP	22			1	7.5	7			.											
68	7.9	SP	27.2			1	7.5	7			.											
72	5.5	SP	19			1	8	7.5			.											
08	5.8	SP	19			1.8	8	7.3			.											
73	5	SP	20			1	8	7.5			.											
04	5	SP	20.5			1	8	7.5			.											
51	5	SP	23			1	8	7.5			.	.										
10	6.5	SP	24.5			1	8	7.5			.											
19	6.5	SP	25			1	8	7.5			.											
49	7	SP	25			1	8	7.3			.											
24	6.5	SP	26			1	8	7.5			.											
53	5	SP	27			1	8	7.5			.											
12	5	SP	28			1	8	7.5			.											
85	7	SP	28			1	8	7.5			.											
63	8	SP	28			1	8	7.5			.											
22	7	SP	29			1	8	7.5			.											
94	4.6	SP	16.2		14.9	1	8.5	7.5		6.8			.									
96	4	SP	16.3		14.9	1	8.5	7.5		6.8			.									
95	5.7	SP	21.1			1	8.5	7.5					.									
93	5.8	SP	23.8		21.7	1	8.5	7.55		6.8			.									

Note: Dot "." means available options.

Pressure Control Curves

C type- Proportional with gain change and forced terminal rise



NO	Output pressure					Stroke					Available types and bodies											
	A	B	C	D	P	E	F	G	H	Q	DHRCJ			DHRCD		DHRCP						
											1/4/5	2/3	6	1/2/3/4/5/6 (Spool Ø6)	4/5 (Spool Ø5.5)	1/3	2	4/6	6	7	8	
03	6.5	SP	26	17.5		1	7	6.5	5		.											
01	5	SP	28	17		1	7	6.5	5		.											
05	6.5	SP	28	17.5		1	7	6.5	5		.											
07	5	SP	28	18		1	7	6.5	5		.											
09	7	SP	28	18		1	7	6.5	5		.											
04	6.5	SP	26	19		1	8	7.5	6.2		.											
02	5	SP	28	19		1	8	7.5	6		.											
06	6.5	SP	28	19		1	8	7.5	6.2		.											
08	5	SP	28	19.5		1	8	7.5	6		.	.										
10	7	SP	28	19.5		1	8	7.5	6		.											

Note: Dot "." means available options.

Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Fluid Conveyance
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Industrial hydraulics
- Orbital motors
- PLUS+1° controllers
- PLUS+1° displays
- PLUS+1° joysticks and pedals
- PLUS+1° operator interfaces
- PLUS+1° sensors
- PLUS+1° software
- PLUS+1° software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway and industrial markets as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

Danfoss Power Solutions – your strongest partner in hydraulics and mobile electrification.

Go to www.danfoss.com for further product information.

We offer you expert worldwide support for ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide you with comprehensive global service for all of our components.

Local address:

Hydro-Gear

www.hydro-gear.com

Daikin-Sauer-Danfoss

www.daikin-sauer-danfoss.com

Danfoss Power Solutions (US) Company
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

Danfoss Power Solutions GmbH & Co. OHG
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

Danfoss Power Solutions ApS
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

Danfoss Power Solutions Trading (Shanghai) Co., Ltd.
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 2080 6201

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.