

BRAKE RELEASE VALVE *BA(3)(4)A

GENERAL DESCRIPTION

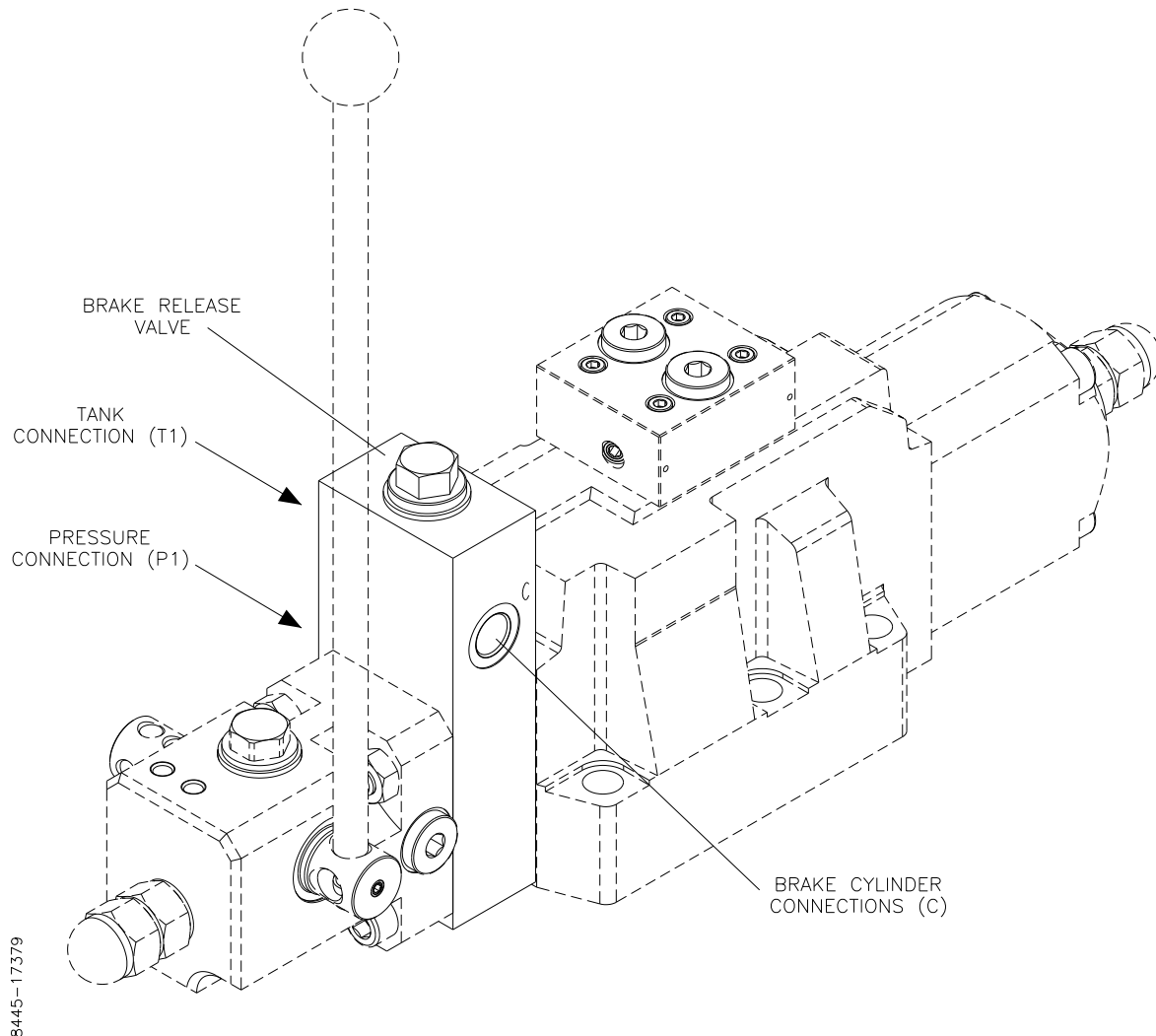


Figure 1 BA General Arrangement

The Brake Release Valves *BA* are seawater resistant valves which intend to control a brake cylinder. The Brake Release Valves are prepared to fit on most of Hydranor's directional valves, and are mechanically activated by the directional valve spool position, which gives a safe reliable function of the brake cylinder. The Directional Control Valves and the Brake Release Valves are delivered in one unit.

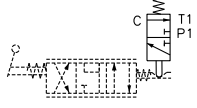

The valves have the following characteristics:

- Delivered with 3 or 4 connections (3/4).
- Suitable for hand lever operated Direction Control Valves.

For more details about types and options, please refer to section 'Modular Code'.

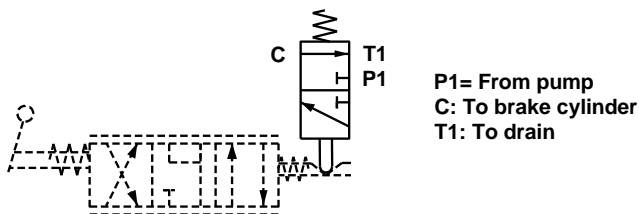
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MODULAR CODE

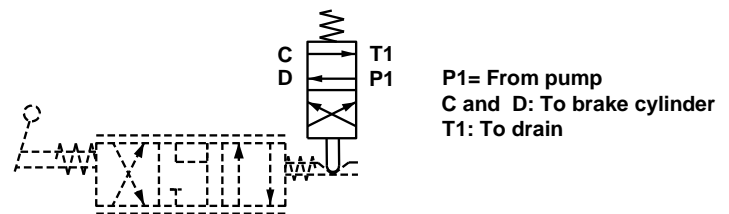
Options	Remarks	Design Code	Fill in
Design			/
Type			
Brake Release	No options	BA	BA
Connections			
3		3	
4		4	
Operation			
Actuator Mechanism	No options		
Size			
10	1STB44*2	2	
16	1STB44*4	4	
25	1STB44*5	5	
15	5ST(B)4413	3	
20	5/13/20 ST(B)	4	
25	5/13/20 ST(B)	5	
30	5/13/20 ST(B)	6	
40	5/13/20 ST(B)	8	

The modular code for the brake release valve is added to the directional control valve code, and starts with the / symbol.

BA3:



BA4:



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DIMENSIONS

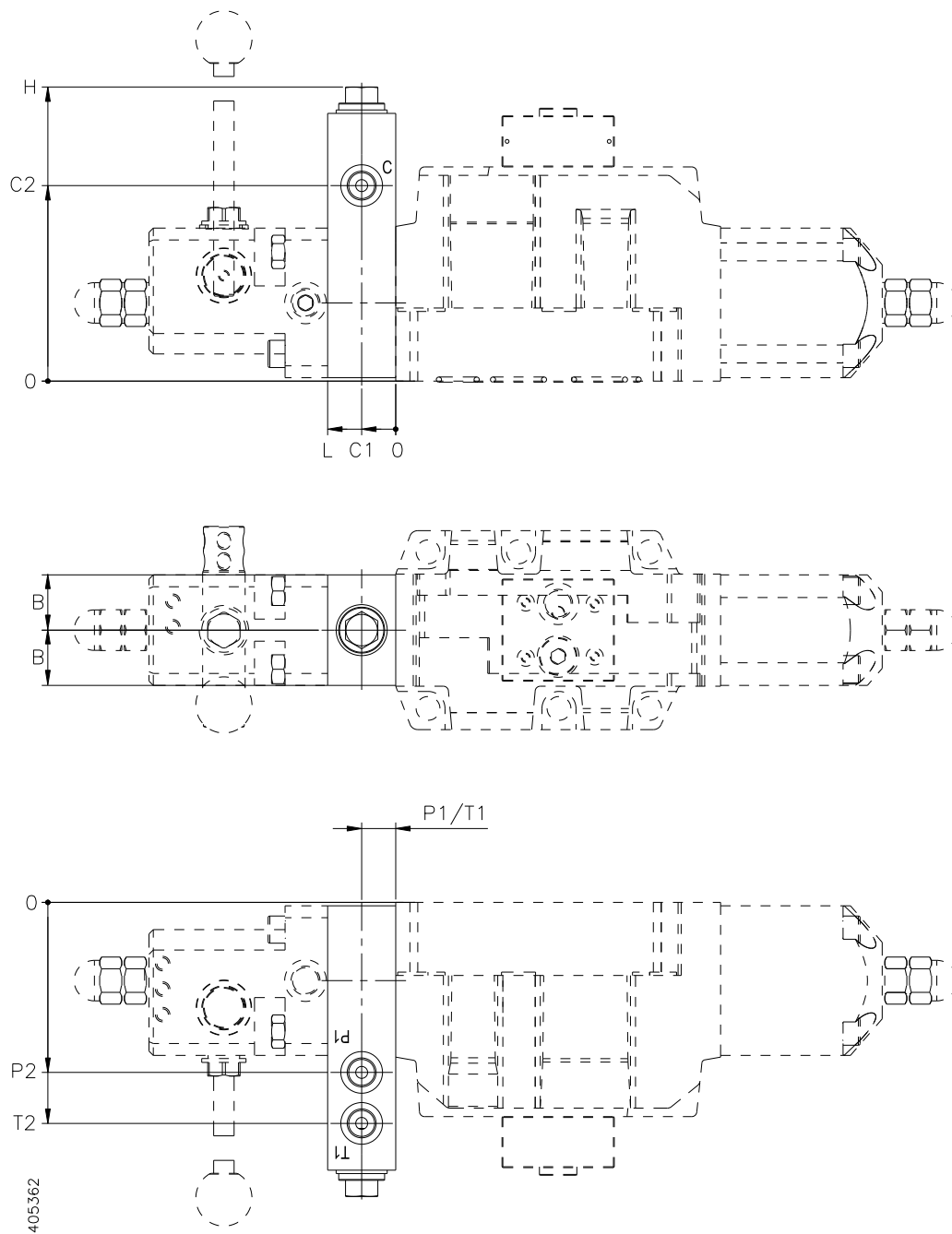


Figure 2 BA for ISTB Valves

BA3/4:

Size [mm]	B	C1	C2	H	L	P1	P2	T1	T2
10	32	25	96.8	141.8	50	14	86.3	36	107.3
16	27.5	15	93.5	138.5	52	15	83	37	104
25	32.5	20	115	173	40	20	100	20	130

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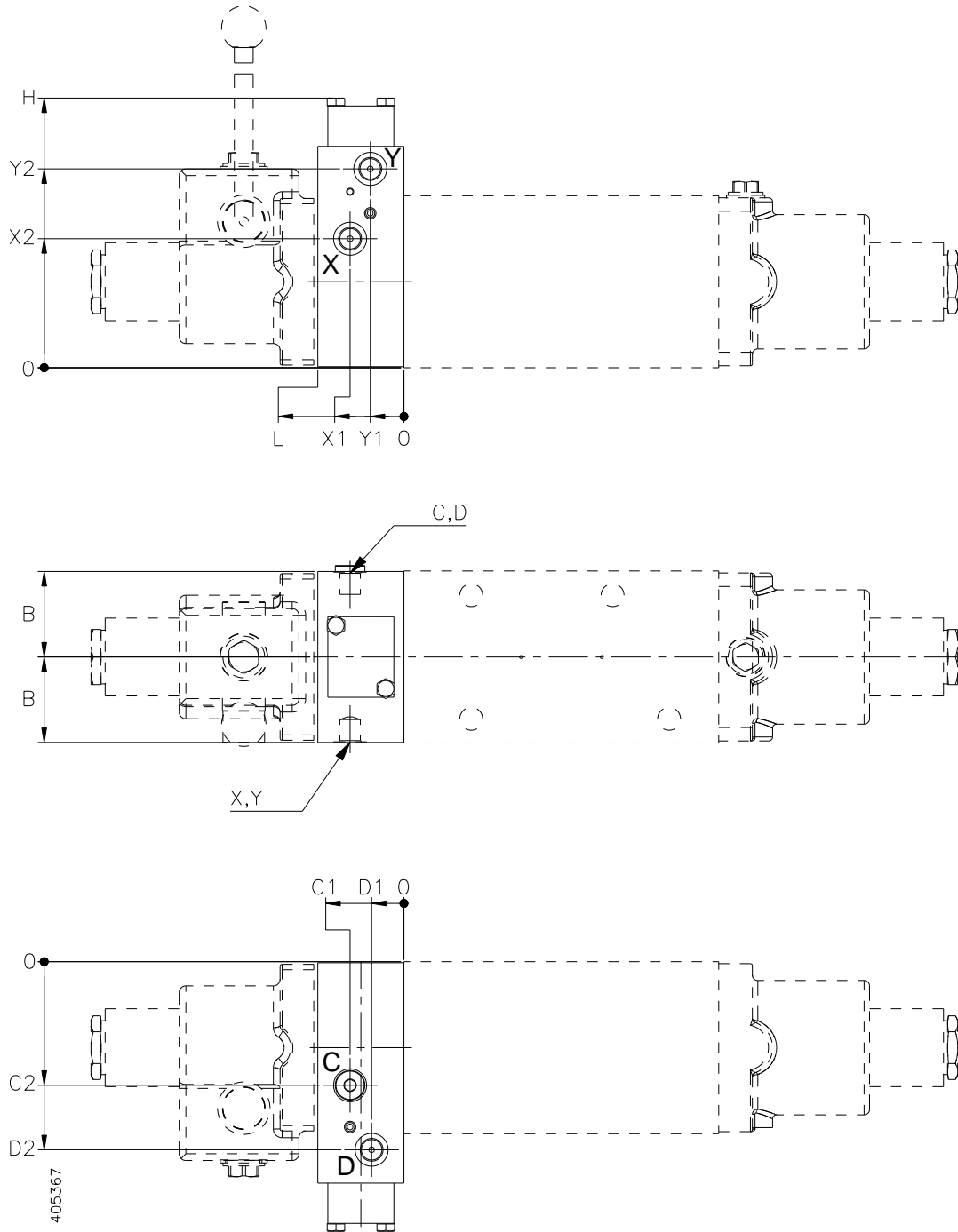


Figure 3 BA for 5/13/20 ST(B) Valves

BA3/4:

Size [mm]	B	C1	C2	D1	D2	H	L	X1	X2	Y1	Y2
15	42	-	-	21.5	115	175	49	27.5	100	27.5	130
20	47	33	98	13	115	175	50	33	106	13	119
25	47	33	109.5	13	126.5	187	50	33	117.5	13	134.5
30	63.5	40	92	24	140	200	64	40	96	25	148
40	68	65.5	120.5	51.5	168.5	229	91.5	65.5	120.5	51.5	176.5

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TECHNICAL DATA

Description	Symbol	Data
Max. operating pressure	P_{\max}	350 bar
Test Pressure		420 bar
Nominal flow all sizes	Q_{nom}	15 l/min
Viscosity range:	ν	10 to 350 mm ² /s (cST)
Viscosity index:	VI	> 120
Filtration, recommended filter with $\beta_{20} \geq 100$		Class 9 according to NAS 1638, 18/15 according to ISO 4406
Fluid temperature range:	T	-20°C to + 70°C
Ambient temperature range	T	-20°C to + 50°C
Standard Body Material		EN-GJS-400-15 (GGG 40)
Standard O-rings		Nitrile shore 70

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Interfaces:

Size [mm]	Description
	<i>Threaded Connections</i>
10	3/8" BSPP
15	3/8" BSPP
16	3/8" BSPP
20	3/8" BSPP
25	3/8" BSPP
30	3/8" BSPP
40	3/8" BSPP

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INSTALLATION

The Brake Release Valves BA(3)(4) are mounted to the Directional Control Valves with 4 off screws.

OPERATION

The valve is operated by the main spool position.

MAINTENANCE

Check the valve for proper function. Visually check the valve and if required, paint unpainted (damaged) areas.

STORAGE

If storage longer than 6 months is expected, the valve must be kept in a dry room, free from dust and protected against sudden large temperature variations. For storage longer than 12 months, the valve must be filled with inhibition oil. Before use check all visible seals and flush with clean oil.

MARKING

Inlets and outlets are marked, refer to figure in section 'General Description'.