



DH-DHZ

Rotary control diverter valves

- 3 - 4 - 6 - 8 ways configuration
- Galvanized body

This catalogue shows technical specifications and diagrams measured with mineral oil of 46 mm²/s (46 cSt) viscosity at 40°C - (104°F) temperature.

WORKING CONDITIONS		DHZ5	DHZ10	DHZ20	DH25	DH30
N. of available ways		3/6 - 4/8	3/6 - 4/8	3/6 - 4/8	3/6 - 4/8	3/6
Max. flow rating		60 l/min (18.5 US gpm)	90 l/min (23.7 US gpm)	140 l/min (37 US gpm)	200 l/min (52.8 US gpm)	280 l/min (74 US gpm)
Max. pressure		315 bar (4600 psi)	315 bar (4600 psi)	315 bar (4600 psi)	250 bar (3600 psi)	210 bar (3050 psi)
Internal leakage A(B)⇒T	Δp = 100 bar (1450 psi)	3 cm ³ /min (0.18 in ³ /min)	3 cm ³ /min (0.18 in ³ /min)	3 cm ³ /min (0.18 in ³ /min)	3 cm ³ /min (0.18 in ³ /min)	3 cm ³ /min (0.18 in ³ /min)
Fluid		Mineral based oil				
Fluid temperature	with NBR (BUNA-N) seals	from -20°C to 80°C (from -4°F to 176°F)				
	with FPM (VITON) seals	from -20°C to 100°C (from -4°F to 212°F)				
Viscosity	operating range	da 15 a 75 mm ² /s (from 15 to 75 cSt)				
	min.	12 mm ² /s (12 cSt)				
	max.	400 mm ² /s (400 cSt)				
Max. level of contamination		21/19/16 - ISO 4406 - NAS 1638 - class 10				
Ambient temperature for working conditions		from -40°C to 60°C (from -40°F to 140°F)				

NOTE - For different working conditions please contact Sales Dept.

Available threads

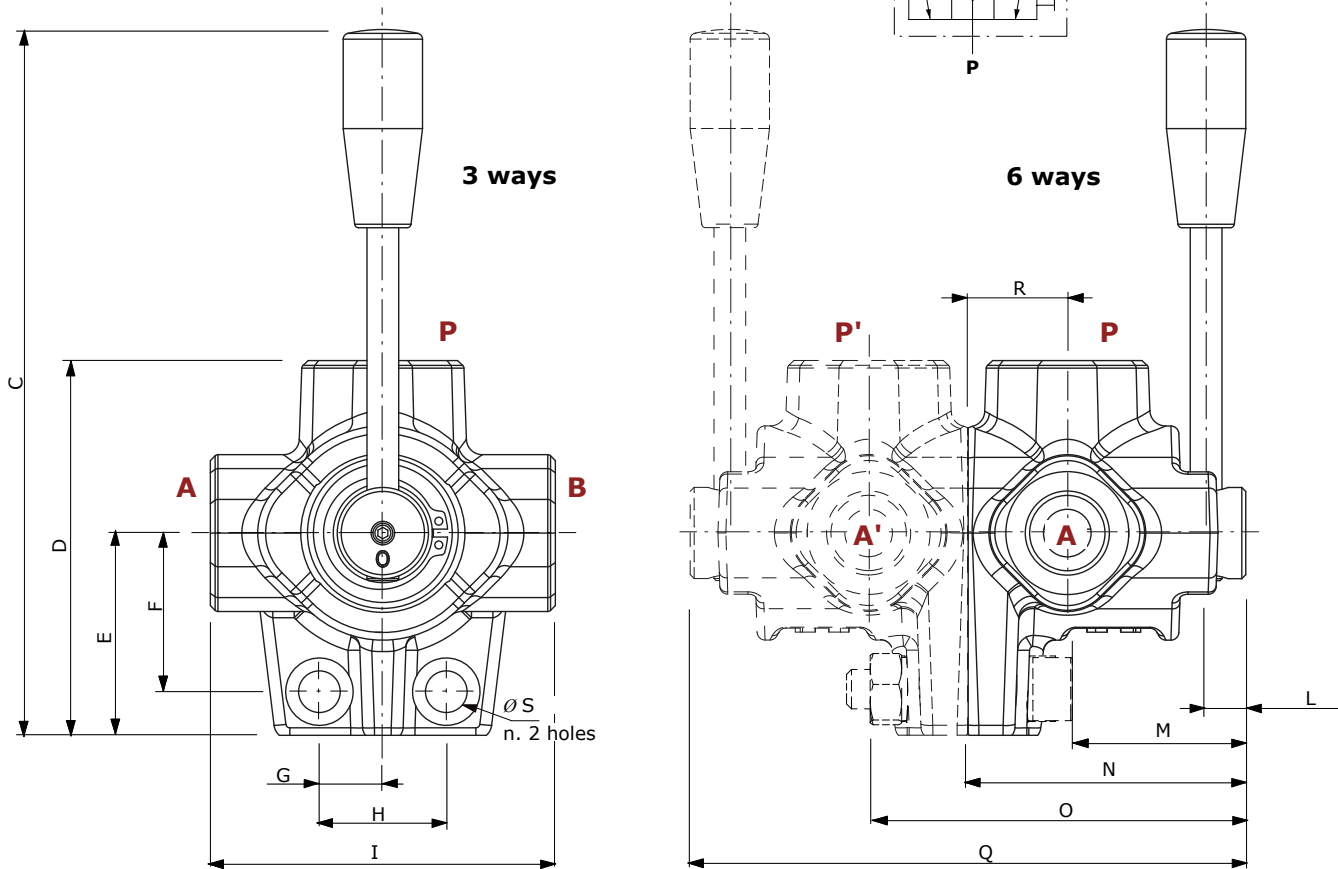
PORTS THREAD		
ALL PORTS	BSP	UN-UNF
DHZ5	G 3/8	3/4-16 (SAE 8)
DHZ10	G 1/2	7/8-14 (SAE 10)
DHZ20	G 3/4	1" 1/16-12 (SAE 12)
DH25	G 1	1" 5/16-12 (SAE 16)
DH30	G 1" 1/2	1" 7/8-12 (SAE 24)

Dimensional data and hydraulic circuit

3 - 6 ways

6-ways diverter valve is obtained by coupling two 3 way bodies with assembling kit

DHZ10 / 3 A SAE (CRZ) Galvanized body (only DHZ body)
 Serie N° ways Spool type Port type (is different from BSP)



Type	C	D	E	F	G	H	I	L	M	N	O	Q	R	Ø S														
															mm* in*													
DHZ5/3	169.5	6.67	77.5	3.05	40.5	1.59	30	1.18	12.2	0.48	24.5	0.96	74	2.91	10	0.39	42	1.65	63	2.48	-	-	21	0.83	8.5	0.33		
DHZ5/6	169.5	6.67	77.5	3.05	40.5	1.59	30	1.18	12.2	0.48	24.5	0.96	74	2.91	10	0.39	42	1.65	63	2.48	84	3.31	126	4.96	21	0.83	8.5	0.33
DHZ10/3	178	7.01	94.5	3.72	51	2.04	40	1.57	16	0.63	32	1.26	87	3.42	10	0.39	45	1.77	70	2.75	-	-	25	0.98	10.5	0.41		
DHZ10/6	178	7.01	94.5	3.72	51	2.04	40	1.57	16	0.63	32	1.26	87	3.42	10	0.39	45	1.77	70	2.75	95	3.74	140	5.51	25	0.98	10.5	0.41
DHZ20/3	196	7.72	105	4.13	60	2.36	45	1.77	16	0.63	32	1.26	92	3.62	10	0.39	48.5	1.90	78.5	3.1	-	-	30	1.18	10.5	0.41		
DHZ20/6	196	7.72	105	4.13	60	2.36	45	1.77	16	0.63	32	1.26	92	3.62	10	0.39	48.5	1.90	78.5	3.1	108.5	4.27	157	6.18	30	1.18	10.5	0.41
DH25/3	204	8.03	120	4.72	70	2.75	55	2.16	16	0.63	32	1.26	100	3.94	14	0.55	58.5	2.30	93.5	3.68	-	-	35	1.38	10.5	0.41		
DH25/6	204	8.03	120	4.72	70	2.75	55	2.16	16	0.63	32	1.26	100	3.94	14	0.55	58.5	2.30	93.5	3.68	128.5	5.06	187	7.36	35	1.38	10.5	0.41
DH30/3	284	11.18	150	5.9	85	3.35	65	2.56	24.5	0.96	49	1.93	130	5.12	15	0.59	69.5	2.74	115.5	4.55	-	-	46	1.81	10.5	0.41		
DH30/6	284	11.18	150	5.9	85	3.35	65	2.56	24.5	0.96	49	1.93	130	5.12	15	0.59	69.5	2.74	115.5	4.55	161.5	6.36	231	9.09	46	1.81	10.5	0.41

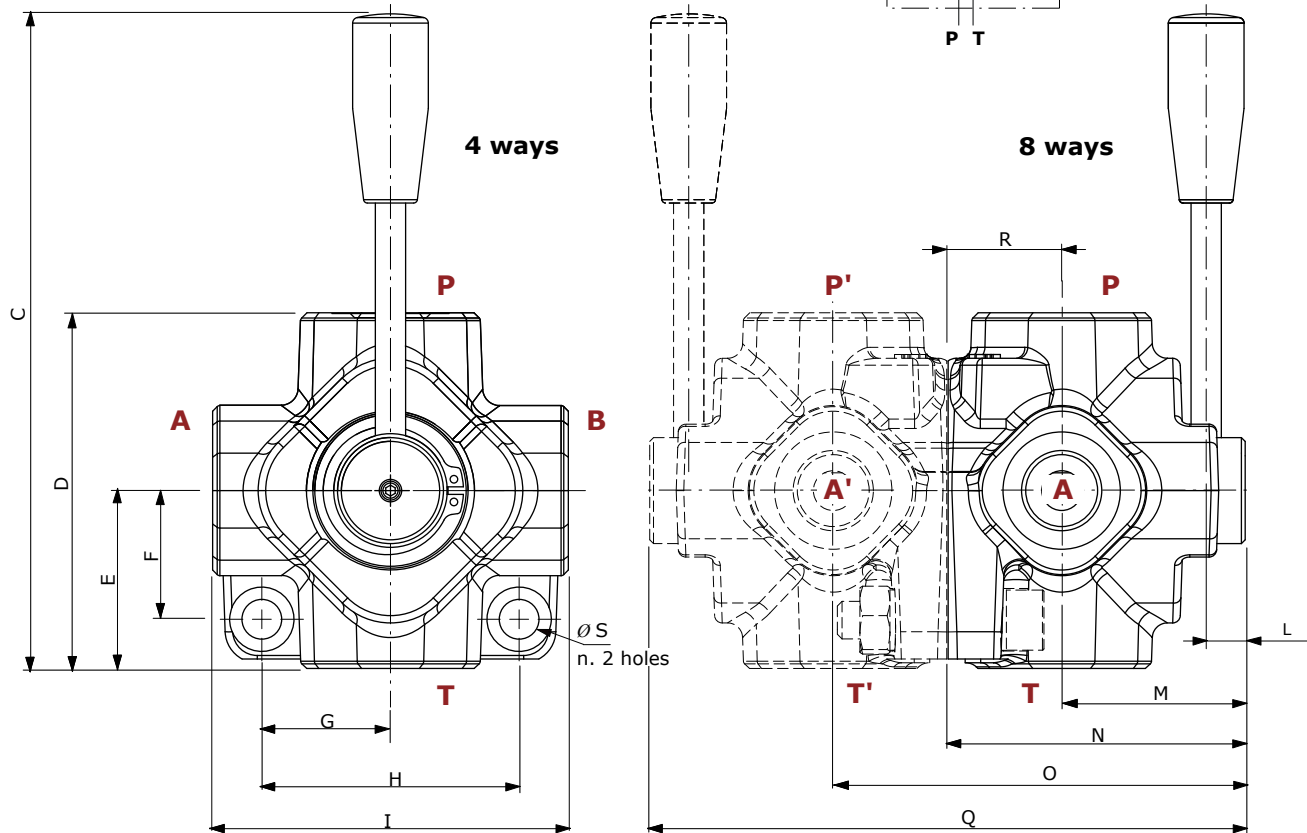
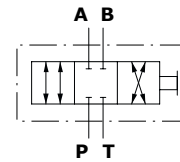
(*) - Codes are referred to **UN-UNF** thread

Dimensional data and hydraulic circuit

4 - 8 ways

8-ways diverter valve is obtained by coupling two 4 way bodies with assembling kit

DHZ10 / 4 A SAE (CRZ) Galvanized body (only DHZ body)
 Serie N° ways Spool type Port type (is different from BSP)

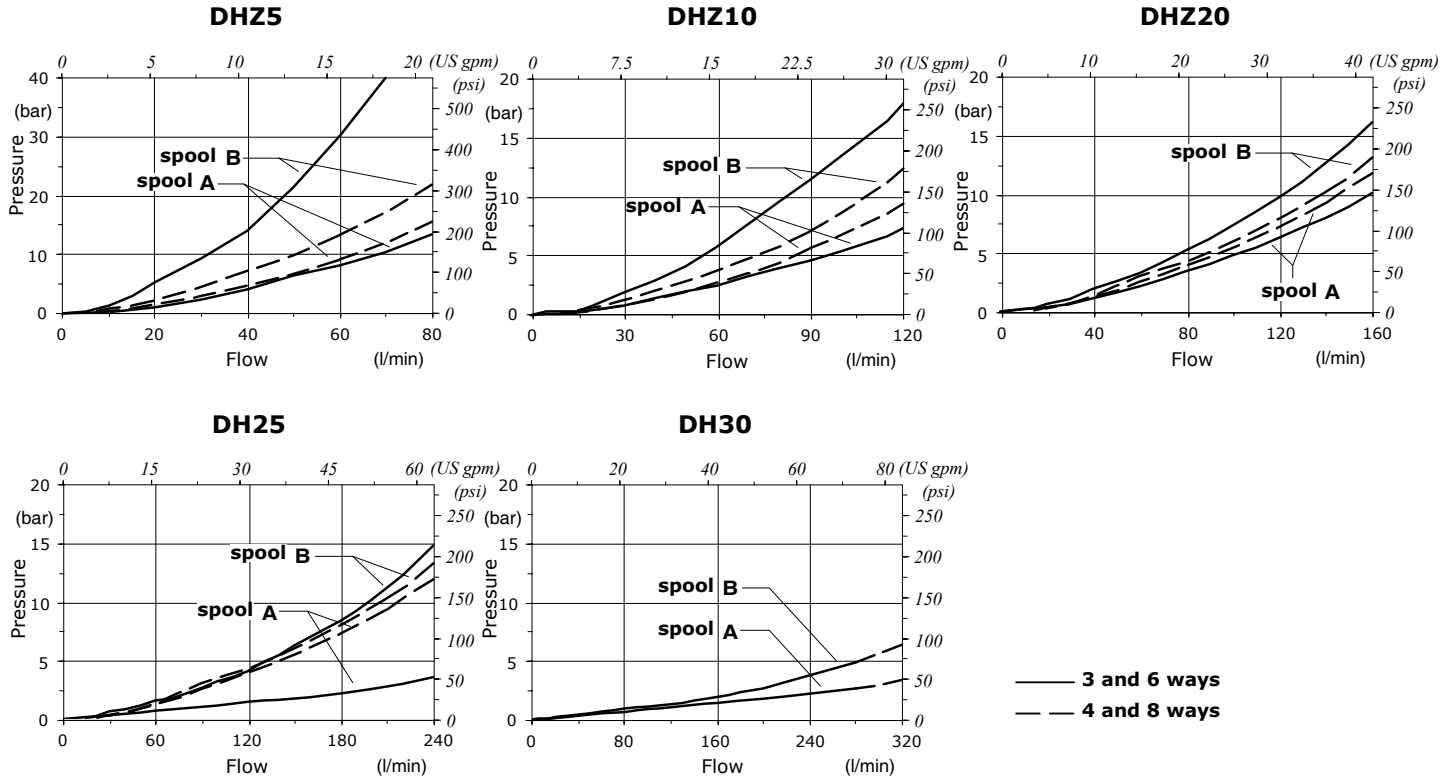


Type	C	D	E	F	G	H	I	L	M	N	O	Q	R	Ø S
	mm* in*													
DHZ5/4	167 6.57	79 3.11	39.5 1.55	27.5 1.08	27 1.06	54 2.12	79 3.11	10 0.39	45 1.77	70 2.75	-	-	25 0.98	8.5 0.33
DHZ5/8	167 6.57	79 3.11	39.5 1.55	27.5 1.08	27 1.06	54 2.12	79 3.11	10 0.39	45 1.77	70 2.75	95 3.74	140 5.51	25 0.98	8.5 0.33
DHZ10/4	173 6.81	94 3.70	47 1.85	34 1.34	34 1.33	68 3.70	94 3.70	10 0.39	48.5 1.91	78.5 3.1	-	-	30 1.18	10.5 0.41
DHZ10/8	173 6.81	94 3.70	47 1.85	34 1.34	34 1.33	68 3.70	94 3.70	10 0.39	48.5 1.91	78.5 3.1	108,5 4.27	157 6.18	30 1.18	10.5 0.41
DH20/4	185 7.28	100 3.94	50 1.97	37 1.46	37 1.45	74 2.91	100 3.94	14 0.55	61 2.40	92 3.62	-	-	31 1.22	10.5 0.41
DH20/8	185 7.28	100 3.94	50 1.97	37 1.46	37 1.45	75 2.95	100 3.94	14 0.55	61 2.40	92 3.62	123 4.84	184 7.24	31 1.22	10.5 0.41
DH25/4	251 9.88	112 4.41	56 2.2	44 1.73	44 1.73	88 3.46	112 4.41	13.5 0.53	60 2.36	95 3.74	-	-	35 1.38	10.5 0.41
DH25/8	251 9.88	112 4.41	56 2.2	44 1.73	44 1.73	88 3.46	112 4.41	13.5 0.53	60 2.36	95 3.74	130 5.12	190 7.48	35 1.38	10.5 0.41

(*) - Codes are referred to UN-UNF thread

Performance data

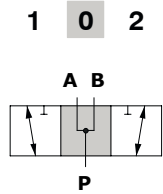
Pressure drop versus flow P → A(B)



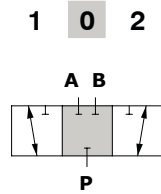
Spool circuits

3 ways

Type A
3 position,
ports connected in pos. 0

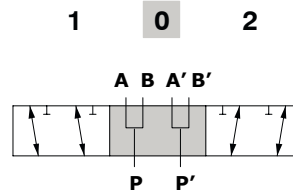


Type B
3 position,
ports closed in pos. 0

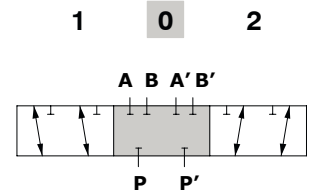


6 ways

Type A
3 position, P and P' line flow on
workports in pos. 0

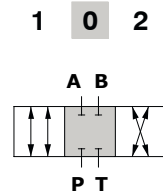


Type B
3 position,
ports closed in pos. 0

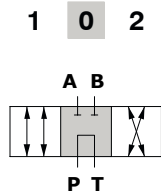


4 ways

Type A
3 position,
ports closed in pos. 0

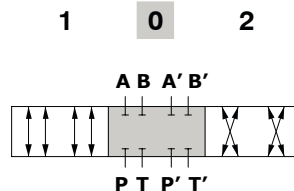


Type B
3 position, P in T,
ports closed in pos. 0

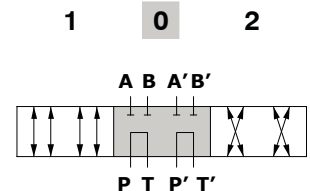


8 ways

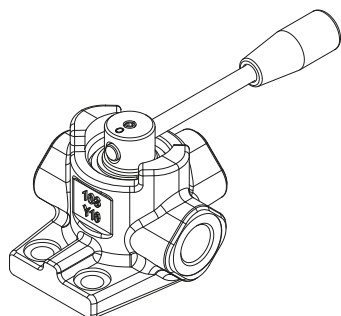
Type A
3 position,
ports closed in pos. 0



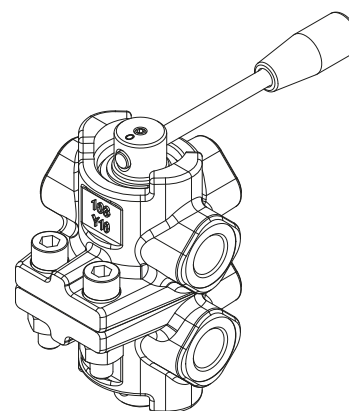
Type B
3 position, P in T,
ports closed in pos. 0



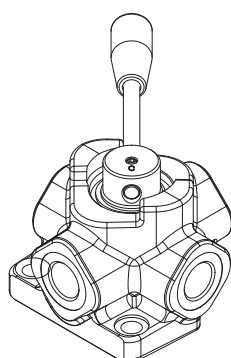
Valve ordering codes



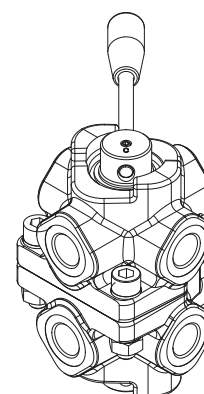
DH-DHZ.../3	
Code*	Description
132Z34110	DHZ5/3A
132Z34210	DHZ5/3B
134Z34110	DHZ10/3A
134Z34210	DHZ10/3B
136Z34110	DHZ20/3A
136Z34210	DHZ20/3B
137034110	DH25/3A
137034210	DH25/3B
139034110	DH30/3A
139034210	DH30/3B



DH-DHZ.../6	
Code*	Description
132Z64110	DHZ5/6A
132Z64210	DHZ5/6B
134Z64110	DHZ10/6A
134Z64210	DHZ10/6B
136Z64110	DHZ20/6A
136Z64210	DHZ20/6B
137064110	DH25/6A
137064210	DH25/6B
139064110	DH30/6A
139061211	DH30/6B



DH-DHZ.../4	
Code*	Description
132Z44110	DHZ5/4A
132Z44210	DHZ5/4B
134Z44111	DHZ10/4A
134Z44211	DHZ10/4B
136044110	DH20/4A
136044210	DH20/4B
137044110	DH25/4A
137044210	DH25/4B



DH-DHZ.../8	
Code*	Description
132Z84110	DHZ5/8A
132Z84210	DHZ5/8B
134Z84110	DHZ10/8A
134Z84210	DHZ10/8B
136084110	DH20/8A
136081211	DH20/8B
137084110	DH25/8A
137084210	DH25/8B

(*) - Codes are referred to **UN-UNF** thread