

HPMC • HSMC

SERIES

MULTI-PORT ROTARY UNIONS



Operating Parameters

MEDIA

Water, Air, Hydraulic Fluid

PRESSURE*

170 PSI (HSMC), 5,880 PSI (HPMC)

TEMPERATURE*

248° F (HSMC & HPMC)

SPEED*

3,000 RPM (HSMC), 180 RPM (HPMC)

THREADS

3/8" to 3/4" NPT or BSP

MATERIAL

Nickel Plated Steel

STANDARD NUMBER OF PORTS

2 to 8

* See Performance
Charts For Details

Features & Benefits

High Pressure Or High Speed Applications

Duff-Norton multi-port Rotary Unions are available in both high pressure (HPMC Series) and high speed (HSMC Series) configurations.

Pressures Up To 5,880 psi

HPMC Series Rotary Unions are designed for higher pressure, available with up to eight ports as standard and are suitable for use in low speed applications for pressures up to 5,880 psi.

Available Up To 4 Ports

HSMC Series Rotary Unions are available with up to four ports as standard.

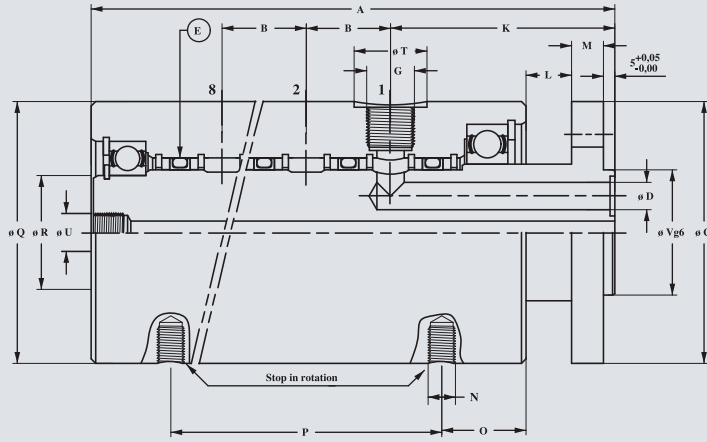
Speeds Up To 3,000 RPM

HSMC Series is perfect for low pressure applications, up to 175 psi with rotational speeds up to 3,000 rpm.

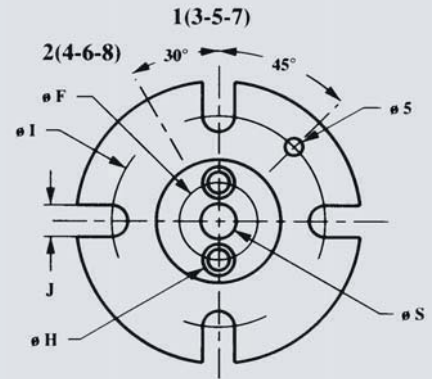
No Cross Contamination

Feel free to run dissimilar fluids through Duff-Norton Multi-Port Rotary Unions as each port is always individually sealed eliminating cross contamination between circuits.

HPMC Series



HPMC End

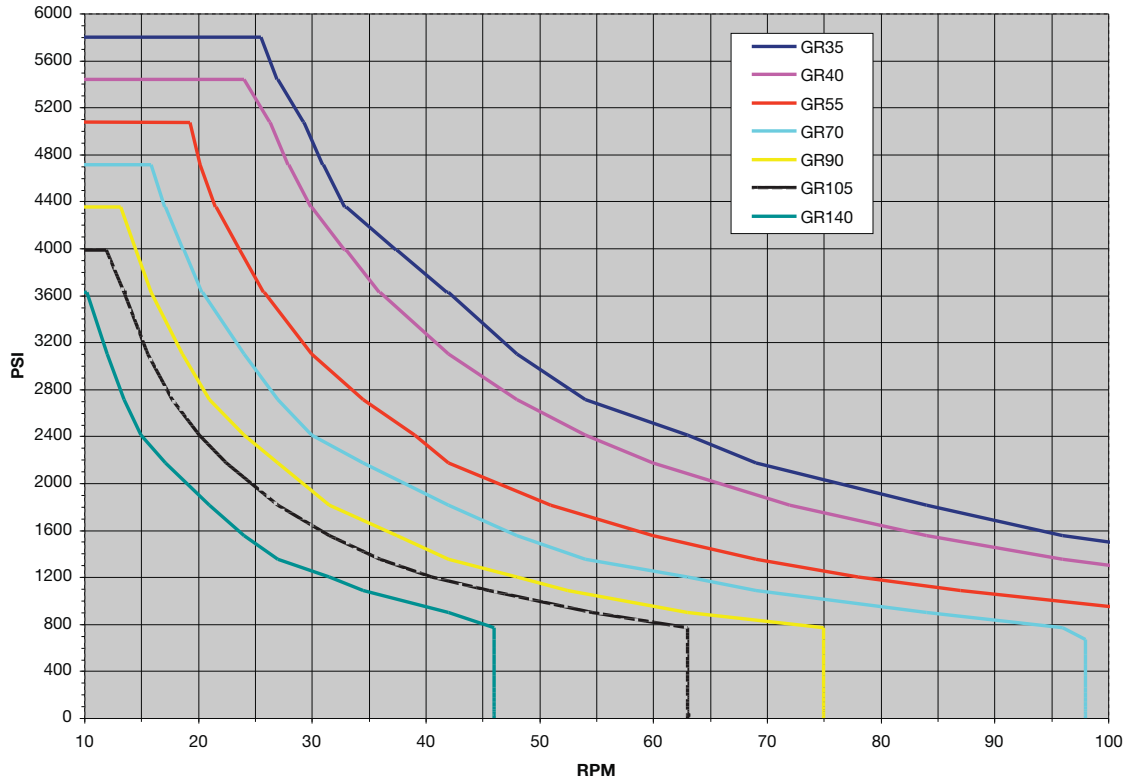


HPMC MULTI-PORT ROTARY UNIONS (in.)

Number of Ports	Part Number	Description	A	B	C	D	E & Vg6	F	G (NPT)	H	Ref. O-ring	I	J	K	L	M	N	O	P	Q	R	S	T	U
2	750748C	RMC206R2KNPT	5.89	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	2.26	3.15	1.18	0.39	0.71	3/8"
3	750749C	RMC306R2KNPT	6.93	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	3.31	3.15	1.18	0.39	0.71	3/8"
4	750750C	RMC406R2KNPT	7.97	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	4.35	3.15	1.18	0.39	0.71	3/8"
5	750751C	RMC506R2KNPT	9.02	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	5.39	3.15	1.18	0.39	0.71	3/8"
6	750752C	RMC606R2KNPT	10.06	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	6.44	3.15	1.18	0.39	0.71	3/8"
7	750753C	RMC706R2KNPT	12.32	1.14	3.94	0.24	40	1.06	1/8"	0.35	06X01.5	2.83	0.43	3.50	0.79	0.47	M8	1.26	8.43	3.54	1.38	0.47	0.71	1/2"
8	750754C	RMC806R2KNPT	13.46	1.14	3.94	0.24	40	1.06	1/8"	0.35	06X01.5	2.83	0.43	3.50	0.79	0.47	M8	1.26	9.57	3.54	1.38	0.47	0.71	1/2"
2	750755C	RMC208R2KNPT	6.77	1.22	3.94	0.31	40	0.94	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	2.87	3.54	1.38	0.31	0.87	1/4"
3	750756C	RMC308R2KNPT	7.99	1.22	3.94	0.31	40	0.94	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	4.09	3.54	1.38	0.31	0.87	1/4"
4	750757C	RMC408R2KNPT	9.21	1.22	3.94	0.31	40	0.94	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	5.31	3.54	1.38	0.31	0.87	1/4"
5	750758C	RMC508R2KNPT	10.43	1.22	3.94	0.31	40	1.02	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	6.54	3.54	1.38	0.39	0.87	3/8"
6	750759C	RMC608R2KNPT	12.48	1.30	4.53	0.31	55	1.48	1/4"	0.47	R6A	3.39	0.43	3.80	0.79	0.55	M10	1.46	8.11	4.53	1.97	0.47	0.87	1/2"
7	750760C	RMC708R2KNPT	13.78	1.30	4.53	0.31	55	1.48	1/4"	0.47	R6A	3.39	0.43	3.80	0.79	0.55	M10	1.46	9.41	4.53	1.97	0.47	0.87	1/2"
8	750761C	RMC808R2KNPT	15.08	1.30	4.53	0.31	55	1.48	1/4"	0.47	R6A	3.39	0.43	3.80	0.79	0.55	M10	1.46	10.71	4.53	1.97	0.47	0.87	1/2"
2	750762C	RMC210R2KNPT	6.93	1.30	3.94	0.39	40	0.94	3/8"	0.49	010X01.3	2.83	0.43	3.58	0.79	0.47	M10	1.26	3.03	3.54	1.38	0.31	0.98	1/4"
3	750763C	RMC310R2KNPT	8.23	1.30	3.94	0.39	40	0.94	3/8"	0.49	010X01.3	2.83	0.43	3.58	0.79	0.47	M10	1.26	4.33	3.54	1.38	0.31	0.98	1/4"
4	750764C	RMC410R2KNPT	9.53	1.30	3.94	0.39	40	0.94	3/8"	0.49	010X01.3	2.83	0.43	3.58	0.79	0.47	M10	1.26	5.63	3.54	1.38	0.31	0.98	1/4"
5	750765C	RMC510R2KNPT	11.57	1.38	4.53	0.39	55	1.34	3/8"	0.49	010X01.3	3.39	0.43	3.84	0.79	0.55	M10	1.46	7.20	4.53	1.97	0.47	0.98	1/2"
6	750766C	RMC610R2KNPT	12.95	1.38	4.53	0.39	55	1.34	3/8"	0.49	010X01.3	3.39	0.43	3.84	0.79	0.55	M10	1.46	8.58	4.53	1.97	0.47	0.98	1/2"
7	750767C	RMC710R2KNPT	14.33	1.38	4.53	0.39	55	1.34	3/8"	0.49	010X01.3	3.39	0.43	3.84	0.79	0.55	M10	1.46	9.96	4.53	1.97	0.47	0.98	1/2"
8	750768C	RMC810R2KNPT	16.26	1.38	5.51	0.39	70	1.85	3/8"	0.49	010X01.3	4.25	0.51	4.27	0.98	0.59	M12	1.57	11.42	5.31	2.56	0.71	0.98	3/4"
2	750769C	RMC212R2KNPT	7.60	1.46	4.53	0.47	55	1.26	1/2"	0.69	R10	3.39	0.43	3.88	0.79	0.55	M12	1.46	3.23	4.53	1.97	0.39	1.26	3/8"
3	750770C	RMC312R2KNPT	9.06	1.46	4.53	0.47	55	1.26	1/2"	0.69	R10	3.39	0.43	3.88	0.79	0.55	M12	1.46	4.69	4.53	1.97	0.39	1.26	3/8"
4	750771C	RMC412R2KNPT	10.51	1.46	4.53	0.47	55	1.26	1/2"	0.69	R10	3.39	0.43	3.88	0.79	0.55	M12	1.46	6.14	4.53	1.97	0.39	1.26	3/8"
5	750772C	RMC512R2KNPT	12.52	1.46	5.51	0.47	70	1.65	1/2"	0.69	R10	4.25	0.51	4.31	0.98	0.59	M12	1.57	7.72	5.31	2.56	0.47	1.26	3/4"
6	750773C	RMC612R2KNPT	15.20	1.54	6.69	0.47	90	2.13	1/2"	0.69	R10	5.20	0.67	4.80	1.18	0.63	M12	1.77	9.72	6.30	3.35	0.71	1.26	3/4"
7	750774C	RMC712R2KNPT	16.73	1.54	6.69	0.47	90	2.13	1/2"	0.69	R10	5.20	0.67	4.80	1.18	0.63	M12	1.77	11.26	6.30	3.35	0.71	1.26	3/4"
8	750775C	RMC812R2KNPT	18.27	1.54	6.69	0.47	90	2.13	1/2"	0.69	R10	5.20	0.67	4.80	1.18	0.63	M12	1.77	12.80	6.30	3.35	0.71	1.26	3/4"
2	750776C	RMC218R2KNPT	8.66	1.69	5.51	0.71	70	1.50	3/4"	0.94	R14	4.25	0.51	4.43	0.98	0.59	M12	1.57	3.86	5.31	2.56	0.39	1.46	3/8"
3	750777C	RMC318R2KNPT	10.35	1.69	5.51	0.71	70	1.50	3/4"	0.94	R14	4.25	0.51	4.43	0.98	0.59	M12	1.57	5.55	5.31	2.56	0.39	1.46	3/8"
4	750778C	RMC418R2KNPT	12.05	1.69	5.51	0.71	70	1.50	3/4"	0.94	R14	4.25	0.51	4.43	0.98	0.59	M12	1.57	7.24	5.31	2.56	0.39	1.46	3/8"
5	750779C	RMC518R2KNPT	14.84	1.77	6.69	0.71	90	2.20	3/4"	0.94	R14	5.20	0.67	4.92	1.18	0.63	M12	1.77	9.37	6.30	3.35	0.71	1.46	3/4"
2	750780C	RMC225R2KNPT	10.08	2.05	6.69	0.98	90	1.97	1"	1.26	R19	5.20	0.67	5.06	1.18	0.63	M14	1.77	4.61	6.30	3.35	0.47	1.69	1/2"
3	750781C	RMC325R2KNPT	12.13	2.05	6.69	0.98	90	1.97	1"	1.26	R19	5.20	0.67	5.06	1.18	0.63	M14	1.77	6.65	6.30	3.35	0.47	1.69	1/2"
4	750782C	RMC425R2KNPT	14.17	2.05	6.69	0.98	90	1.97	1"	1.26	R19	5.20	0.67	5.06	1.18	0.63	M14	1.77	8.70	6.30	3.35	0.47	1.69	1/2"
5	750783C	RMC525R2KNPT	17.32	2.17	7.48	0.98	105	2.72	1"	1.26	R19	5.91	0.67	5.41	1.18	0.63	M14	2.05	11.38	7.48	3.94	0.71	1.69	3/4"
2	750784C	RMC231R2KNPT	11.30	2.40	7.48	1.22	105	2.24	1-1/4"	1.44	R22	5.91	0.67	5.53	1.18	0.63	M14	2.05	5.35	7.48	3.94	0.47	2.17	1/2"
3	750785C	RMC331R2KNPT	13.70	2.40	7.48	1.22	105	2.24	1-1/4"	1.44	R22	5.91	0.67	5.53	1.18	0.63	M14	2.05	7.76	7.48	3.94	0.47	2.17	1/2"
4	750786C	RMC431R2KNPT	16.10	2.40	7.48	1.22	105	2.24	1-1/4"	1.44	R22	5.91	0.67	5.53	1.18	0.63	M14	2.05	10.16	7.48	3.94	0.47	2.17	1/2"
5	750787C	RMC531R2KNPT	20.87	2.64	9.06	1.22	140	3.43	1-1/4"	1.44	R22	7.24	0.67	6.28	1.18	0.79	M16	2.44	13.90	9.06	5.12	0.71	2.17	3/4"

Performance Charts

HPMC SERIES



GR seals are used in these High Pressure Multi-Circuit Models						
GR35	GR40	GR55	GR70	GR90	GR105	GR140
MC206R2K	MC706R2K	MC608R2K	MC810R2K	MC612R2K	MC525R2K	MC531R2K
MC306R2K	MC806R2K	MC708R2K	MC512R2K	MC712R2K	MC231R2K	
MC406R2K	MC208R2K	MC808R2K	MC218R2K	MC812R2K	MC331R2K	
MC506R2K	MC308R2K	MC510R2K	MC318R2K	MC518R2K	MC431R2K	
MC606R2K	MC408R2K	MC610R2K	MC418R2K	MC618R2K		
	MC508R2K	MC710R2K		MC225R2K		
	MC210R2K	MC212R2K		MC325R2K		
	MC310R2K	MC312R2K		MC425R2K		
	MC410R2K	MC412R2K				

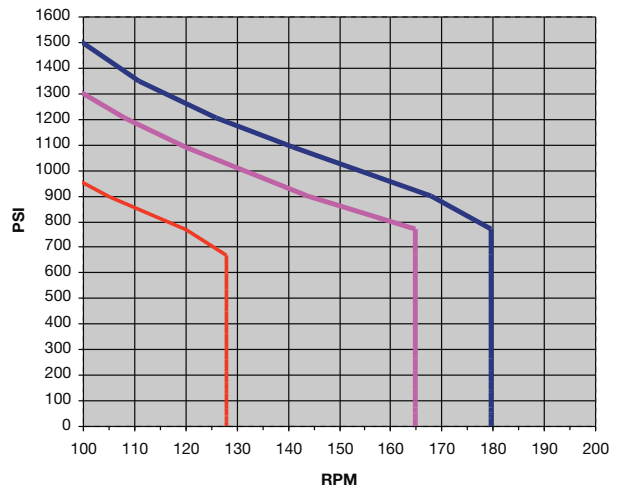
Performance charts are for oil, grease or similar lubricating media. For media such as water or air, reduce the maximum recommended speed as follows:

For Water: Multiply speed by 0.67

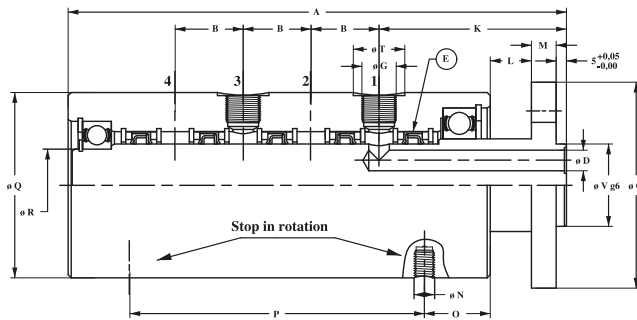
For Air: Multiply speed by 0.33

Where maximum recommended speeds are found on the horizontal axis.

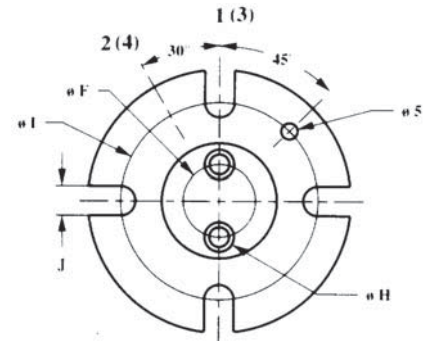
HPMC SERIES OVER 100 RPM



HSMC Series



HSMC End

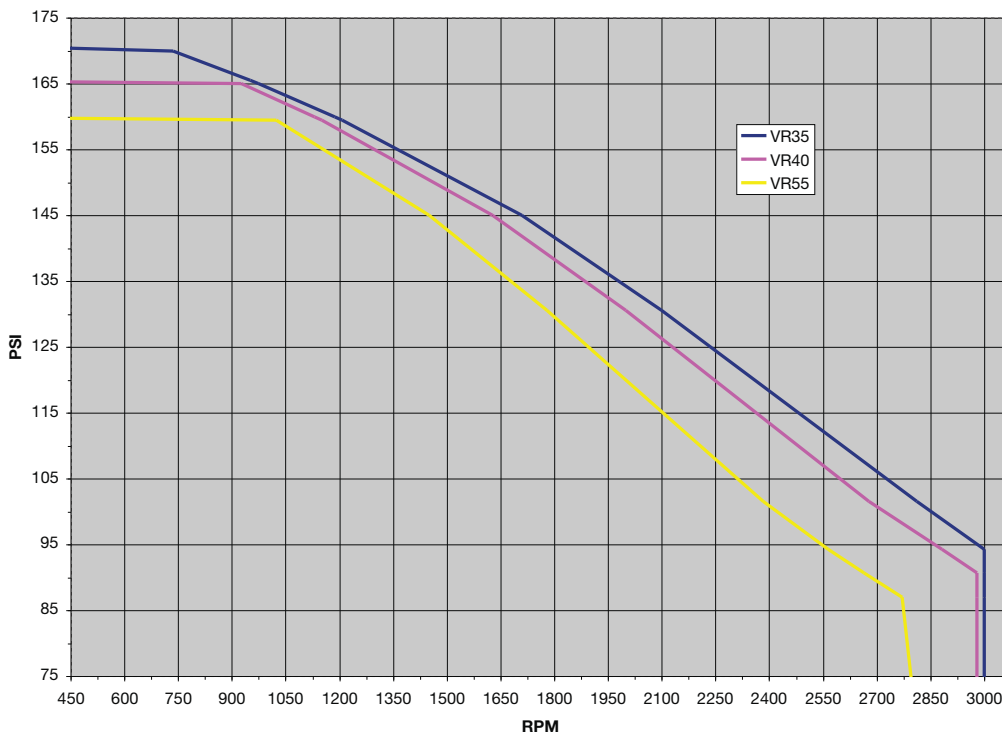


HSMC MULTI-PORT ROTARY UNIONS (in.)

Number of Ports	Part Number	Description	A	B	C	D	V	F	G (NPT)	H	Ref. O-ring	I	J	K	L	M	N	O	P	Q	R	T
2	750889C	RMC206RVRKNPT	5.89	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	2.26	3.15	1.18	0.71
3	750809C	RMC306RVRKNPT	6.93	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	3.31	3.15	1.18	0.71
4	750810C	RMC406RVRKNPT	7.97	1.04	3.15	0.24	35	0.87	1/8"	0.35	06X01.5	2.36	0.35	3.05	0.59	0.39	M8	1.26	4.35	3.15	1.18	0.71
2	750811C	RMC208RVRKNPT	6.77	1.22	3.94	0.31	40	0.94	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	2.87	3.54	1.38	0.87
3	750812C	RMC308RVRKNPT	7.99	1.22	3.94	0.31	40	0.94	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	4.09	3.54	1.38	0.87
4	750813C	RMC408RVRKNPT	9.21	1.22	3.94	0.31	40	0.94	1/4"	0.47	R6A	2.83	0.43	3.54	0.79	0.47	M10	1.26	5.31	3.54	1.38	0.87
2	750814C	RMC210RVRKNPT	6.93	1.30	3.94	0.39	40	0.94	3/8"	0.49	010X01.3	2.83	0.43	3.58	0.79	0.47	M10	1.26	3.03	3.54	1.38	0.98
3	750815C	RMC310RVRKNPT	8.23	1.30	3.94	0.39	40	0.94	3/8"	0.49	010X01.3	2.83	0.43	3.58	0.79	0.47	M10	1.26	4.33	3.54	1.38	0.98
4	750816C	RMC410RVRKNPT	9.53	1.30	3.94	0.39	40	0.94	3/8"	0.49	010X01.3	2.83	0.43	3.58	0.79	0.47	M10	1.26	5.63	3.54	1.38	0.98

Performance Charts

HSMC SERIES



VR seals are used in these High Speed Multi-Circuit Models

GR35	GR40	GR55
MC206R VR	MC208R VR	MC212R VR
MC306R VR	MC308R VR	MC312R VR
MC406R VR	MC408R VR	MC412R VR
	MC210R VR	
	MC310R VR	
	MC410R VR	

Performance chart is for lubricated air, dry air, liquid and oils.

Maximum recommended speeds are found on the horizontal axis.