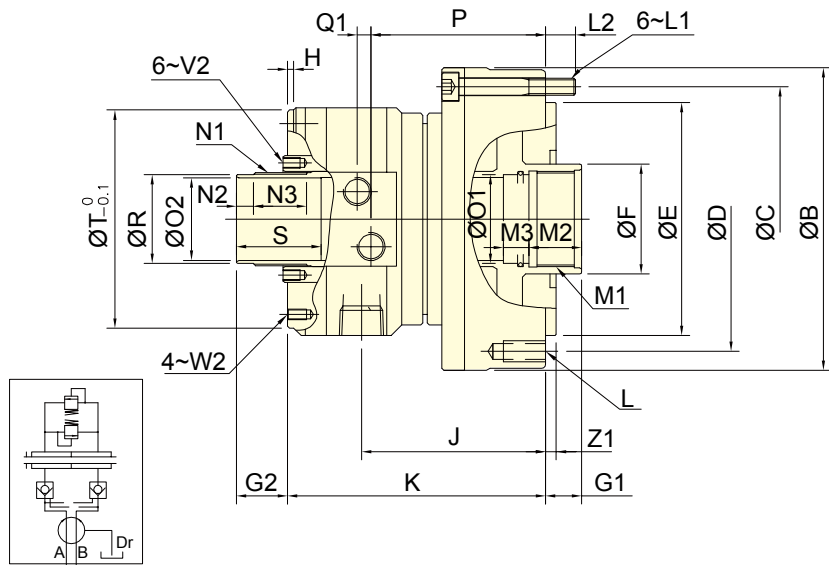
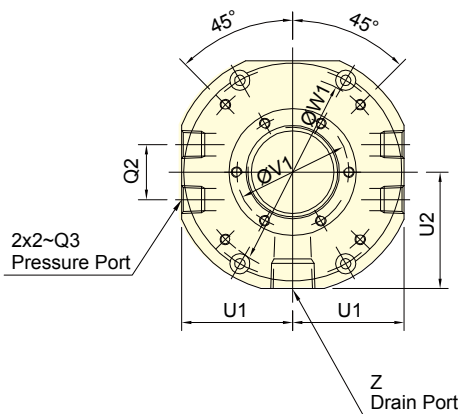




- Compact short-length design with lightweight construction for space-saving installation.
- Built-in check valve and pressure relief valve ensure enhanced operational safety.
- Large oil inlet and drain ports provide high oil flow and smooth drainage.
- Supports both front-end and rear-end mounting for flexible installation options.
- Suitable for use with both vertical and horizontal spindles.
- Linear sensor can be attached.(optional)



Subject to technical changes

SPECIFICATIONS

Model	Eff. piston area		Piston stroke	Max. speed	Max. pressure	Moment of inertia	Weight	Total oil leakage
	Extend	Retract						
	cm ²	cm ²	mm	min ⁻¹ (r.p.m.)	MPa(kgf/cm ²)	kg·m ²	kg	lit. / min.
TR-539	72.4	67.1	15	8000	4.0(40)	0.010	6.8	3.0
TR-646	105.0	93.9	15	7000	4.0(40)	0.015	9.5	3.0
TR-853	135.3	125	20	6300	4.0(40)	0.032	11.5	3.9
TR-1075	170	155	25	4500	4.0(40)	0.065	18	4.2
TR-1291	234	217.5	30	3500	4.0(40)	0.092	29.5	4.5

DIMENSIONS

Model	A	B	C	D	E	F	G1		G2		H	J	K	L	L1	L2	M1	M2	M3
	I.D.				h7		max.	min.	max.	min.									
TR-539	107	143	125	125	110	52	15	0	34	19	4	97	133	6-M10x20	M8x60	12	M45x1.5	25	12
TR-646	128	165	147	147	130	65	15	0	34	19	3.5	97	135	12-M10x20	M8x60	11.5	M55x2	25	13
TR-853	145	185	165	170	130	70	20	0	47	27	4.5	118.5	160	12~M10X20	M8x75	12	M60x2	30	15
TR-1075	170	212	190	190	160	95	25	0	52	27	4.5	129.5	181	12~M10x20	M10x1.5	16	M85x2	35	15
TR-1291	200	248	225	215	180	110	30	0	59	29	5	146	240.5	12~M12x24	M10x95	16	M100x2	35	15

Model	N1	N2	N3	O1	O2	P	Q1	Q2	Q3	R	S	T	U1	U2	V1	V2	W1	W2	Z	Z1
				H8	H8					g7										
TR-539	M44x1.5	8	25	42	39	92.5	6.5	26	RC 1/4	42	40	103	52.5	55	53	M5x8	90	M5x9	RC 1/2	5
TR-646	M52x1.5	8	25	50	46	95	5	32	RC 3/8	50	50	116	59	62	61.5	M5x9	98	M5x9	RC 1/2	5
TR-853	M58x1.5	8	30	55	53	114	8	34	RC 3/8	56	50	128	65	67	70	M5x10	110	M6x11	RC 1/2	5
TR-1075	M84x2	9	33	80	75	123.5	12	40	RC 1/2	81	50	164	83	86	95	M5x10	155	M6x11	RC 3/4	5
TR-1291	M99x2	9	38	95	91	139	14	45	RC1/2	96	50	180	91.5	93	110.5	M6x12	165	M6x12	RC3/4	5

*Coolant Collector and Confirmation Device Please See Accessories pages.