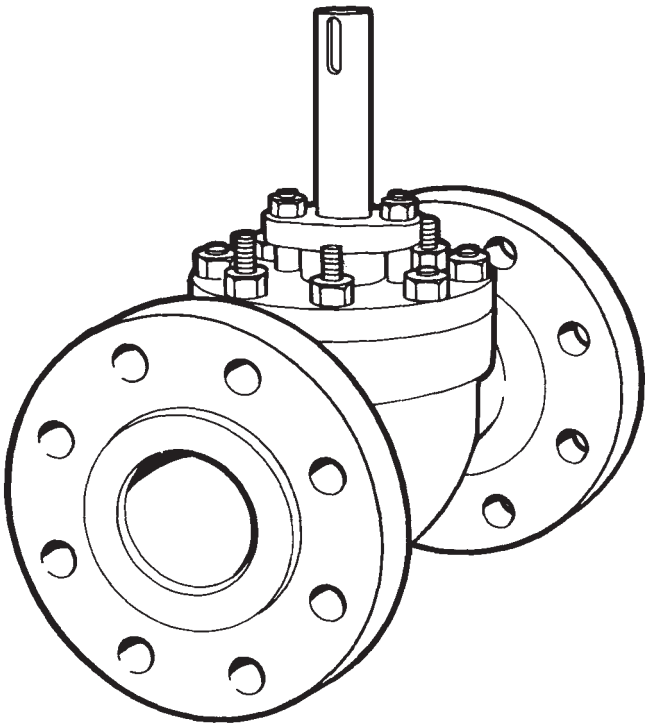
neles

Top entry rotary control valve

Series Top5®

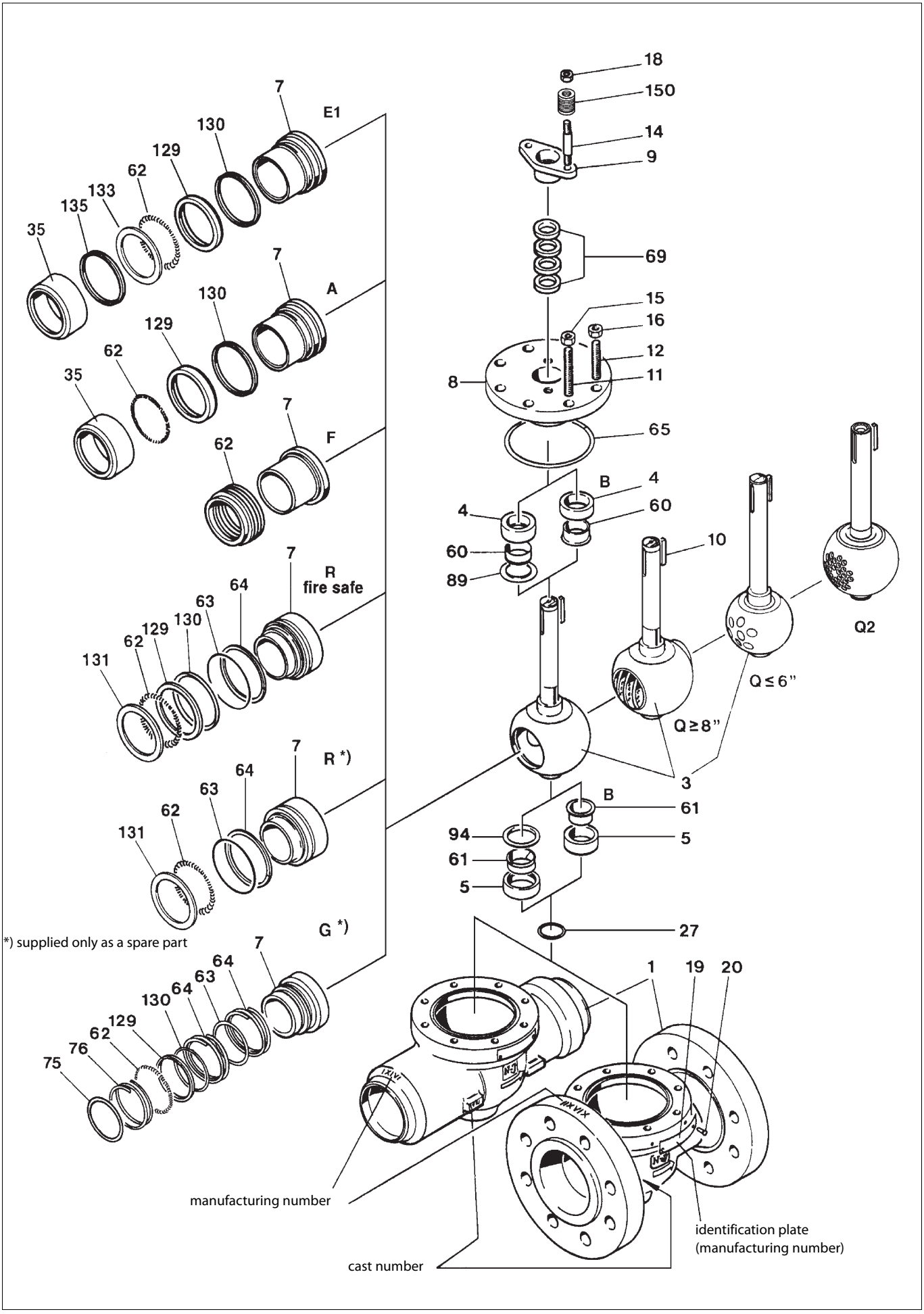
Installation, Maintenance and
Operating Instructions



metso
Expect results

1 T5 71 en • 2/2020

11 EXPLODED VIEW

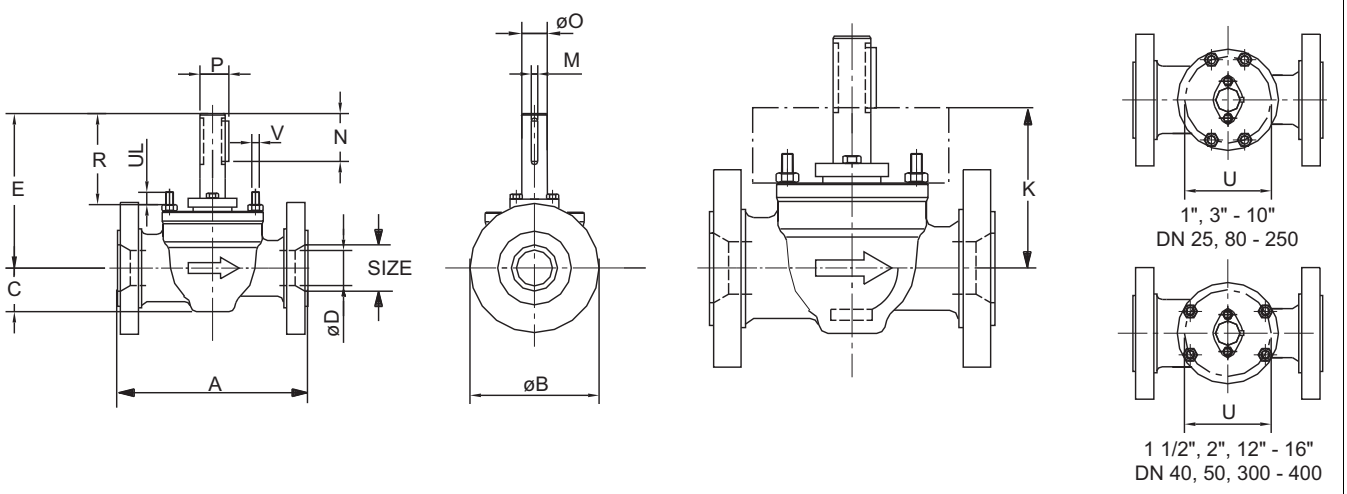


12 PARTS LIST

Item	Qty.	Description	Spare part category
1	1	Body	
3	1	Ball	3
4	1	Thrust bearing	3
5	1	Trunnion bearing	3
7	1	Seat	2
8	1	Bonnet	
9	1	Gland	
10	1	Key	3
11		Stud	
12		Stud	
14		Stud	
15		Hexagon nut	
16		Hexagon nut	
18		Hexagon nut	
19	1	Identification plate	
20	2	Screw	
27	1	Lock ring	
35	1	Supportr ing	2
60	1	Bearing	3
61	1	Bearing	3
62	1	Spring	2
63	1	O-ring	
64	1 (G-seat: 2)	Support ring	
65	1	Gasket	1
69		Gland packing	1
75	1	O-ring	
76	1 (4")	Support ring	
89	1	Thrust bearing	1***
94	1	Thrust bearing	1***
125	1	O-ring sleeve	
129	1	Ring	2
130	1	Back seal	2
131	1	Spring retainer	
133	1	Ring	
135	1	Seal	

Spare part set category 1: Recommended soft parts, always needed for the repair. Delivered as a set.
***) Bearing set
Spare part category 2: Parts for replacing of the seat. Available also as a set.
Spare part category 3: Parts for replacing of the closing element.
Spares for the full overhaul: All parts from the categories 1, 2 and 3

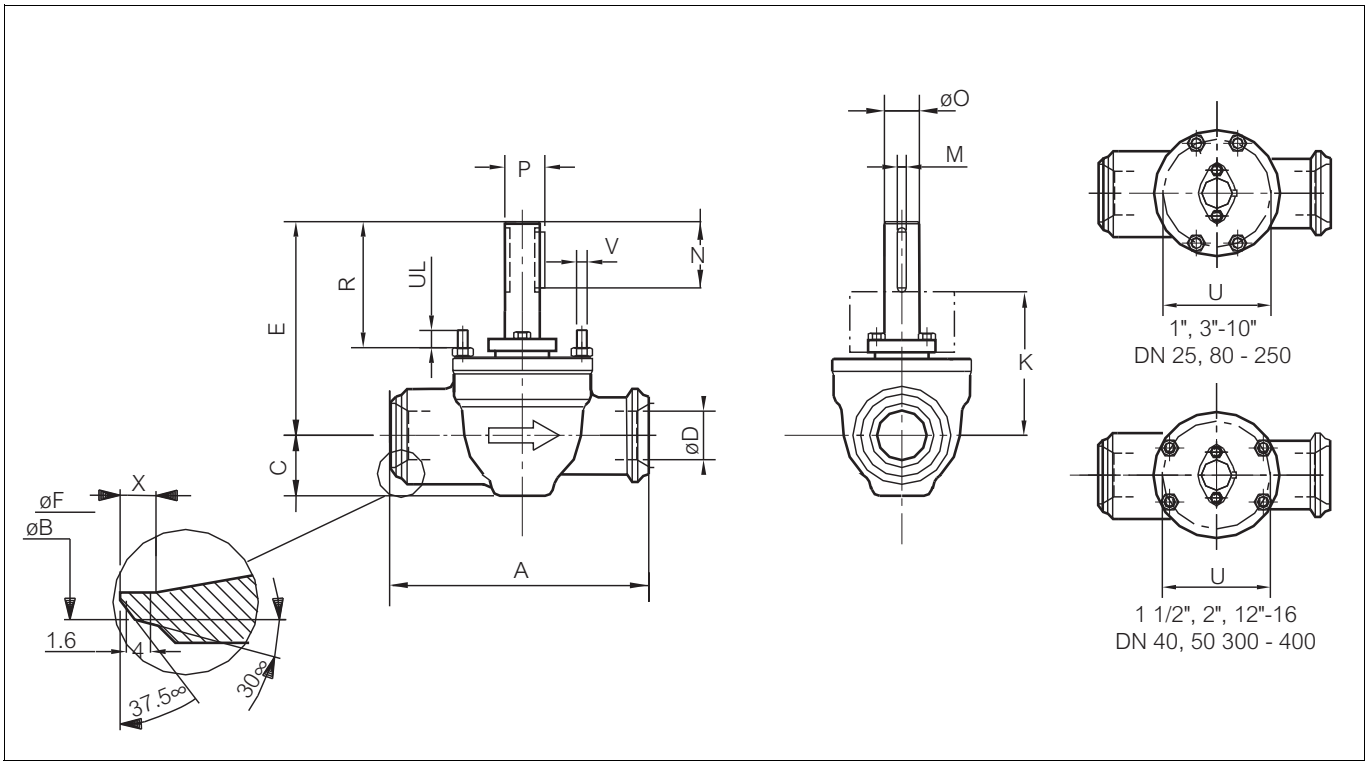
13 DIMENSIONS AND WEIGHTS



T5

Type	DN	T5D/T5M			T5F/T5N/T5P				DIMENSIONS, mm												T5D/T5M	T5F/T5N/T5P
		A	B		A	B															ASME 300 / PN 40	ASME 600 / PN 63, 100
			ASME 300	PN40		ASME 600	PN63	PN100	C	ø D	E	K	M	N	ø O	P	R	U	UL	V	kg	kg
T5_01	25	197	124	115	210	124	140	140	38	25	158	133	4.76	25	15	16.96	89	84	22	3/8 UNC	10	11
T5_015	40	235	155	150	251	155	170	170	60	38	200	165	4.76	35	20	22.22	105	110	30	5/8 UNC	15	17
T5_02	50	267	165	165	286	165	180	195	60	38	200	165	4.76	35	20	22.22	105	110	30	5/8 UNC	19	21
T5_03	80	317	210	200	337	210	215	230	71	50	230	184	6.35	46	25	27.8	124	128	28	5/8 UNC	32	36
T5_04	100	368	254	235	394	273	250	265	90	76	280	222	9.52	58	35	39.1	138	173	43	3/4 UNC	56	69
T5_06	150	473	318	300	508	356	345	355	122	102	362	280	12.7	80	45	50.4	185	220	44	1 UNC	115	147
T5_08	200	568	381	375	610	419	415	430	140	125	415	325	12.7	90	55	60.6	208	272	44	1 UNC	239	287
T5_10	250	708	445	450	752	508	470	505	170	152	420	330	12.7	90	55	60.6	195	319	40	1 UNC	315	403
T5_12	300	775	521	515	819	559	530	585	210	202	520	401	19.05	119	70	78.2	235	400	56	1 1/4 UNC	530	613
T5_14	350	927	584	580	972	603	600	655	275	254	730	584	22.225	146	85	94.6	389	480	60	1 1/4 UNC	1050	1123
T5_16	400	1057	648	660	1108	686	670	-	275	254	730	584	22.225	146	85	94.6	389	480	60	1 1/4 UNC	1100	1228

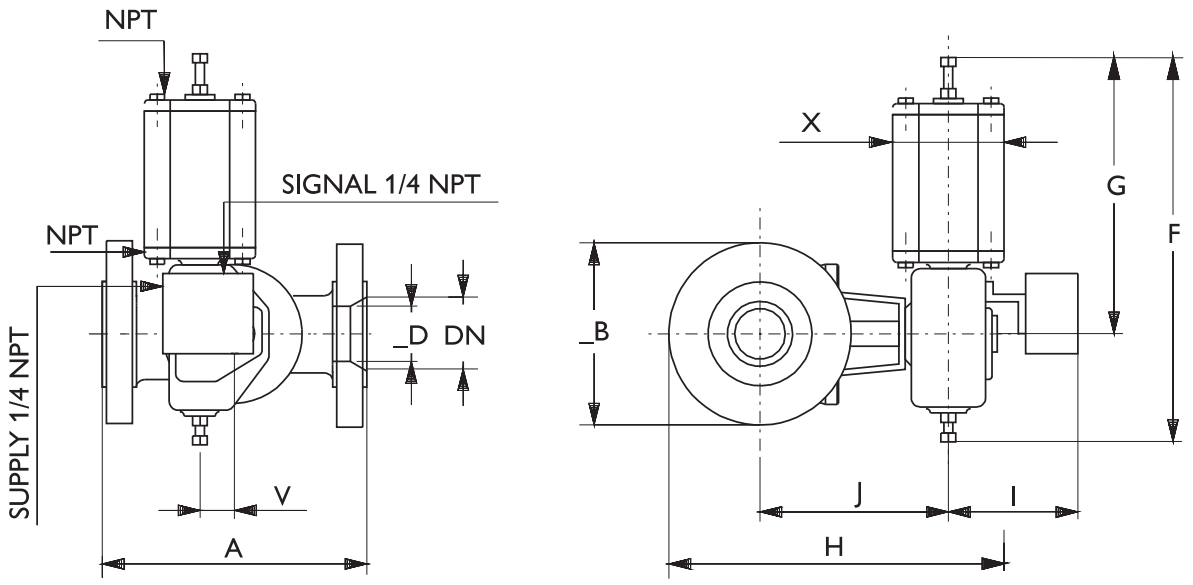
Type	DN	T5D/T5M			T5F/T5N/T5P				DIMENSIONS, inch												T5D	T5F
		A	B		A	B															ASME 300	ASME 600
			ASME 300	PN40		ASME 600	PN63	PN100	C	ø D	E	K	M	N	ø O	P	R	U	UL	V	lbs	lbs
T5_01	1	7.76	4.88	4.53	8.27	4.88	5.51	5.51	1.50	0.98	6.22	5.24	0.19	0.98	0.59	0.67	3.50	3.31	0.87	3/8 UNC	22	24
T5_015	1.5	9.25	6.10	5.91	9.88	6.10	6.69	6.69	2.36	1.50	7.87	6.50	0.19	1.38	0.79	0.87	4.13	4.33	1.18	5/8 UNC	33	37
T5_02	2	10.51	6.50	6.50	11.26	6.50	7.09	7.68	2.36	1.50	7.87	6.50	0.19	1.38	0.79	0.87	4.13	4.33	1.18	5/8 UNC	42	46
T5_03	3	12.48	8.27	7.87	13.27	8.27	8.46	9.06	2.80	1.97	9.06	7.24	0.25	1.81	0.98	1.09	4.88	5.04	1.10	5/8 UNC	70	79
T5_04	4	14.49	10.00	9.25	15.51	10.75	9.84	10.43	3.54	2.99	11.02	8.74	0.37	2.28	1.38	1.54	5.43	6.81	1.69	3/4 UNC	123	152
T5_06	6	18.62	12.52	11.81	20.00	14.02	13.58	13.98	4.80	4.02	14.25	11.02	0.50	3.15	1.77	1.98	7.28	8.66	1.73	1 UNC	253	323
T5_08	8	22.36	15.00	14.76	24.02	16.50	16.34	16.93	5.51	4.92	16.34	12.80	0.50	3.54	2.17	2.39	8.19	10.71	1.73	1 UNC	526	631
T5_10	10	27.87	17.52	17.72	29.61	20.00	18.50	19.88	6.69	5.98	16.54	12.99	0.50	3.54	2.17	2.39	7.68	12.56	1.57	1 UNC	693	887
T5_12	12	30.51	20.51	20.28	32.24	22.01	20.87	23.03	8.27	7.95	20.47	15.79	0.75	4.69	2.76	3.08	9.25	15.75	2.20	1 1/4 UNC	1166	1349
T5_14	14	36.50	22.99	22.83	38.27	23.74	23.62	25.79	10.83	10.00	28.74	22.99	0.88	5.75	3.35	3.72	15.31	18.90	2.36	1 1/4 UNC	2310	2471
T5_16	16	41.61	25.51	25.98	43.62	27.01	26.38	-	10.83	10.00	28.74	22.99	0.88	5.75	3.35	3.72	15.31	18.90	2.36	1 1/4 UNC	2420	2702



T4D/T4F

DIMENSIONS, mm																				
Type	DN	A	ø B	C	ø D	E	T4D ø F	T4F ø F	K	M	N	ø O	P	R	U	V	UL	T4D Xmin	T4F Xmin	kg
T4_01	25	210	36	38	25	158	26.6	24.4	133	4.76	25	15	16.95	89	84	3/8 UNC	22	-	-	10
T4_015	40	251	52	60	38	200	40.6	37.8	165	4.76	35	20	22.22	105	110	5/8 UNC	30	-	-	15
T4_02	50	292	62	60	38	200	52.5	49.3	165	4.76	35	20	22.22	105	110	5/8 UNC	30	7	9.5	18
T4_03	80	356	91	71	50	230	77.9	73.7	184	6.35	46	25	27.8	124	128	5/8 UNC	28	10	13	32
T4_04	100	432	117	90	76	280	102.3	97.1	222	9.52	58	35	39.1	138	173	3/4 UNC	43	11	15	65
T4_06	150	559	172	122	102	362	154.1	146.3	280	12.7	80	45	50.4	185	220	1 UNC	44	13	20	125
T4_08	200	660	223	140	125	415	202.7	188.9	325	12.7	90	55	60.6	208	272	1 UNC	44	15.2	25.5	210
T4_10	250	787	278	170	152	420	254.4	242.8	330	12.7	90	55	60.6	195	319	1 UNC	40	17.7	26.5	275
T4_12	300	838	329	210	202	520	303.2	288.8	401	19.05	119	70	78.2	235	400	1 1/4-8 UN	56	19.3	30	475
T4_14	350	889	362	275	254	730	333.4	317.6	584	22.225	146	85	94.6	389	480	1 1/4-8 UN	60	30	30	930
T4_16	400	991	413	275	254	730	381	363.6	584	22.225	146	85	94.6	389	480	1 1/4-8 UN	60	35	30	960

DIMENSIONS, inch																				
Type	DN	A	ø B	C	ø D	E	T4D ø F	T4F ø F	K	M	N	ø O	P	R	U	V	UL	T4D Xmin	T4F Xmin	lbs
T4_01	1	8.27	1.42	1.50	0.98	6.22	1.05	0.96	5.24	0.19	0.98	0.59	0.67	3.50	3.31	3/8 UNC	0.87	-	-	22
T4_015	1.5	9.88	2.05	2.36	1.50	7.87	1.60	1.49	6.50	0.19	1.38	0.79	0.87	4.13	4.33	5/8 UNC	1.18	-	-	33
T4_02	2	11.50	2.44	2.36	1.50	7.87	2.07	1.94	6.50	0.19	1.38	0.79	0.87	4.13	4.33	5/8 UNC	1.18	0.28	0.37	39.6
T4_03	3	14.02	3.58	2.80	1.97	9.06	3.07	2.90	7.24	0.25	1.81	0.98	1.09	4.88	5.04	5/8 UNC	1.10	0.39	0.51	70.4
T4_04	4	17.01	4.61	3.54	2.99	11.02	4.03	3.82	8.74	0.37	2.28	1.38	1.54	5.43	6.81	3/4 UNC	1.69	0.43	0.59	143
T4_06	6	22.01	6.77	4.80	4.02	14.25	6.07	5.76	11.02	0.50	3.15	1.77	1.98	7.28	8.66	1 UNC	1.73	0.51	0.79	275
T4_08	8	25.98	8.78	5.51	4.92	16.34	7.98	7.44	12.80	0.50	3.54	2.17	2.39	8.19	10.71	1 UNC	1.73	0.60	1.00	462
T4_10	10	30.98	10.94	6.69	5.98	16.54	10.02	9.56	12.99	0.50	3.54	2.17	2.39	7.68	12.56	1 UNC	1.57	0.70	1.04	605
T4_12	12	32.99	12.95	8.27	7.95	20.47	11.94	11.37	15.79	0.75	4.69	2.76	3.08	9.25	15.75	1 1/4-8 UN	2.20	0.76	1.18	1045
T4_14	14	35.00	14.25	10.83	10.00	28.74	13.13	12.50	22.99	0.88	5.75	3.35	3.72	15.31	18.90	1 1/4-8 UN	2.36	1.18	1.18	2046
T4_16	16	39.02	16.26	10.83	10.00	28.74	15.00	14.31	22.99	0.88	5.75	3.35	3.72	15.31	18.90	1 1/4-8 UN	2.36	1.38	1.18	2112



T05D-BC, B1C

Type	DN	A	_B	_D	F	G	H	I	J	V	X	NPT	kg
T5D01 - B1C6	25	197	124	25	400	260	335	215	191	36	90	1/4	14
T5D01 - B1C9	25	197	124	25	455	315	330	220	192	43	110	1/4	20
T5D015 - B1C6	40	235	155.4	38	400	260	380	215	223	36	90	1/4	19
T5D015 - B1C9	40	235	155.4	38	455	315	380	220	225	43	110	1/4	25
T5D015 - B1C11	40	235	155.4	38	540	375	390	225	230	51	135	3/8	31
T5D02 - B1C6	50	267	165.1	38	400	260	385	215	223	36	90	1/4	23
T5D02 - B1C9	50	267	165.1	38	455	315	385	220	225	43	110	1/4	29
T5D02 - B1C11	50	267	165.1	38	540	375	395	225	230	51	135	3/8	35
T5D03 - B1C11	80	317	209.5	50	540	375	430	225	245	51	135	3/8	48
T5D03 - B1C13	80	317	209.5	50	635	445	460	235	260	65	175	3/8	63
T5D04 - B1C13	100	368	254	76	635	445	525	235	303	65	175	3/8	87
T5D04 - B1C17	100	368	254	76	770	545	555	255	315	78	215	1/2	110
T5D04 - B1C20	100	368	254	76	840	575	590	270	337	97	215	1/2	129
T5D06 - B1C17	150	473	317.5	102	770	545	645	255	375	78	215	1/2	169
T5D06 - B1C20	150	473	317.5	102	840	575	680	270	397	97	215	1/2	188
T5D06 - B1C25	150	473	317.5	102	1040	710	735	310	415	121	265	1/2	245
T5D08 - B1C20	200	568	381	125	840	575	755	270	440	97	215	1/2	312
T5D08 - B1C25	200	568	381	125	1040	710	815	310	465	121	265	1/2	369
T5D08 - B1C32	200	568	381	125	1330	910	895	350	505	153	395	3/4	489
T5D10 - B1C25	250	708	444.5	152	1040	710	865	310	480	121	265	1/2	445
T5D10 - B1C32	250	708	444.5	152	1330	910	940	350	515	153	395	3/4	565
T5D10 - B1C40	250	708	444.5	152	1660	1150	1040	370	565	194	505	3/4	760
T5D12 - B1C25	300	775	520.7	202	1040	710	960	310	539	121	265	1/2	660
T5D12 - B1C32	300	775	520.7	202	1330	910	1040	350	576	153	395	3/4	780
T5D12 - B1C40	300	775	520.7	202	1660	1150	1140	370	626	194	505	3/4	975
T5D14 - B1C32	350	927	584.2	254	1330	910	1250	350	755	153	395	3/4	1300
T5D14 - B1C40	350	927	584.2	254	1660	1150	1350	370	805	194	505	3/4	1495
T5D14 - B1C50	350	927	584.2	254	1970	1350	1455	415	855	242	610	1	1880
T5D16 - B1C32	400	1057	647.7	254	1330	910	1280	350	755	153	395	3/4	1350
T5D16 - B1C40	400	1057	647.7	254	1660	1150	1385	370	805	194	505	3/4	1545
T5D16 - B1C50	400	1057	647.7	254	1970	1350	1485	415	855	242	610	1	1930

T5F-BC, B1C

Type	DN	A	_B	_D	F	G	H	I	J	V	X	NPT	kg
T5F01 - B1C6	25	210	124	25	400	260	298	215	191	36	90	1/4	15
T5F01 - B1C9	25	210	124	25	455	315	309	220	192	43	110	1/4	21
T5F015 - B1C6	40	251	155.4	38	400	260	350	215	223	36	90	1/4	21
T5F015 - B1C9	40	251	155.4	38	455	315	380	220	225	43	110	1/4	27
T5F015 - B1C11	40	251	155.4	38	540	375	390	225	230	51	135	3/8	33
T5F02 - B1C6	50	286	165.1	38	400	260	385	215	223	36	90	1/4	25
T5F02 - B1C9	50	286	165.1	38	455	315	385	220	225	43	110	3/8	31
T5F02 - B1C11	50	286	165.1	38	540	375	395	225	230	51	135	3/8	37
T5F03 - B1C11	80	337	209.5	50	540	375	430	225	245	51	135	3/8	52
T5F03 - B1C13	80	337	209.5	50	635	445	460	235	260	65	175	3/8	67
T5F04 - B1C13	100	394	273.1	76	635	445	535	235	303	65	175	3/8	100
T5F04 - B1C17	100	394	273.1	76	770	545	565	255	315	78	215	1/2	123
T5F04 - B1C20	100	394	273.1	76	840	575	600	270	337	97	215	1/2	142
T5F06 - B1C17	150	508	355.6	102	770	545	665	255	375	78	215	1/2	201
T5F06 - B1C20	150	508	355.6	102	840	575	700	270	397	97	215	1/2	220
T5F06 - B1C25	150	508	355.6	102	1040	710	755	310	415	121	265	1/2	277
T5F08 - B1C20	200	610	419.1	125	840	575	775	270	440	97	215	1/2	360
T5F08 - B1C25	200	610	419.1	125	1040	710	835	310	465	121	265	1/2	417
T5F08 - B1C32	200	610	419.1	125	1330	910	915	350	505	153	395	3/4	537
T5F10 - B1C25	250	752	508	152	1040	710	895	310	480	121	265	1/2	533
T5F10 - B1C32	250	752	508	152	1330	910	970	350	515	153	395	3/4	653
T5F10 - B1C40	250	752	508	152	1660	1150	1075	370	565	194	505	3/4	848
T5F12 - B1C25	300	819	558.8	202	1040	710	980	310	539	121	265	1/2	743
T5F12 - B1C32	300	819	558.8	202	1330	910	1060	350	576	153	395	3/4	863
T5F12 - B1C40	300	819	558.8	202	1660	1150	1160	370	626	194	505	3/4	1058
T5F14 - B1C32	350	972	603.3	254	1330	910	1260	350	755	153	395	3/4	1373
T5F14 - B1C40	350	972	603.3	254	1660	1150	1360	370	805	194	505	3/4	1568
T5F14 - B1C50	350	972	603.3	254	1970	1350	1465	415	855	242	610	1	1953
T5F16 - B1C32	400	1108	685.8	254	1330	910	1300	350	755	153	395	3/4	1478
T5F16 - B1C40	400	1108	685.8	254	1660	1150	1400	370	805	194	505	3/4	1673
T5F16 - B1C50	400	1108	685.8	254	1970	1350	1505	415	855	242	610	1	2058

T5D-BJ/BJA, B1J/B1JA

Type	DN	A	_B	_D	F	G	H	I	J	V	X	NPT	kg
T5D01 - B1J/B1JA6	25	197	124	25	485	368	313	219	191	36	110	3/8	23
T5D01 - B1J/B1JA8	25	197	124	25	560	420	320	220	192	43	135	3/8	27
T5D01 - B1J10	25	197	124	25	650	490	350	225	198	51	175	3/8	40
T5D015 - B1J/B1JA8	40	235	155.4	38	560	420	380	220	225	43	135	3/8	32
T5D015 - B1J/B1JA10	40	235	155.4	38	650	490	395	225	230	51	175	3/8	45
T5D015 - B1J12	40	235	155.4	38	800	620	440	235	255	65	215	1/2	72
T5D02 - B1J/B1JA8	50	267	165.1	38	560	420	385	220	225	43	135	3/8	36
T5D02 - B1J/B1JA10	50	267	165.1	38	650	490	400	225	230	51	175	3/8	49
T5D02 - B1J12	50	267	165.1	38	800	620	445	235	255	65	215	1/2	76
T5D03 - B1J/B1JA10	80	317	209.5	50	650	490	440	225	245	51	175	3/8	62
T5D03 - B1J/B1JA12	80	317	209.5	50	800	620	475	235	260	65	215	1/2	89
T5D03 - B1J/B1JA16	80	317	209.5	50	990	760	515	255	275	78	265	1/2	132
T5D04 - B1J/B1JA12	100	368	254	76	800	620	540	235	303	65	215	1/2	113
T5D04 - B1J/B1JA16	100	368	254	76	990	760	575	255	315	78	265	1/2	156
T5D04 - B1J/B1JA20	100	368	254	76	1200	935	660	270	337	97	395	3/4	231
T5D06 - B1J/B1JA16	150	473	317.5	102	990	760	670	255	378	78	265	1/2	215
T5D06 - B1J/B1JA20	150	473	317.5	102	1200	935	755	270	395	97	395	3/4	290
T5D06 - B1J/B1JA25	150	473	317.5	102	1530	1200	830	310	415	121	505	3/4	465
T5D08 - B1J/B1JA20	200	568	381	125	1200	935	830	270	440	97	395	3/4	414
T5D08 - B1J/B1JA25	200	568	381	125	1530	1200	910	310	465	121	505	3/4	589
T5D08 - B1J/B1JA32	200	568	381	125	1830	1410	965	350	505	153	540	1	909
T5D10 - B1J/B1JA20	250	708	444.5	152	1200	935	865	270	445	97	395	3/4	490
T5D10 - B1J/B1JA25	250	708	444.5	152	1530	1200	955	310	480	121	505	3/4	665
T5D10 - B1J/B1JA32	250	708	444.5	152	1830	1410	1010	350	515	153	540	1	985
T5D12 - B1J/B1JA25	300	775	520.7	202	1530	1410	1055	270	539	121	505	3/4	880
T5D12 - B1J/B1JA32	300	775	520.7	202	1830	1410	1110	350	576	153	540	1	1200
T5D14 - B1J/B1JA32	350	927	584.2	254	1830	1410	1320	350	755	153	540	1	1720
T5D16 - B1J/B1JA32	400	1057	647.7	254	1830	1410	1350	350	755	153	540	1	1770

T5F-BJ/BJA, B1J/B1JA

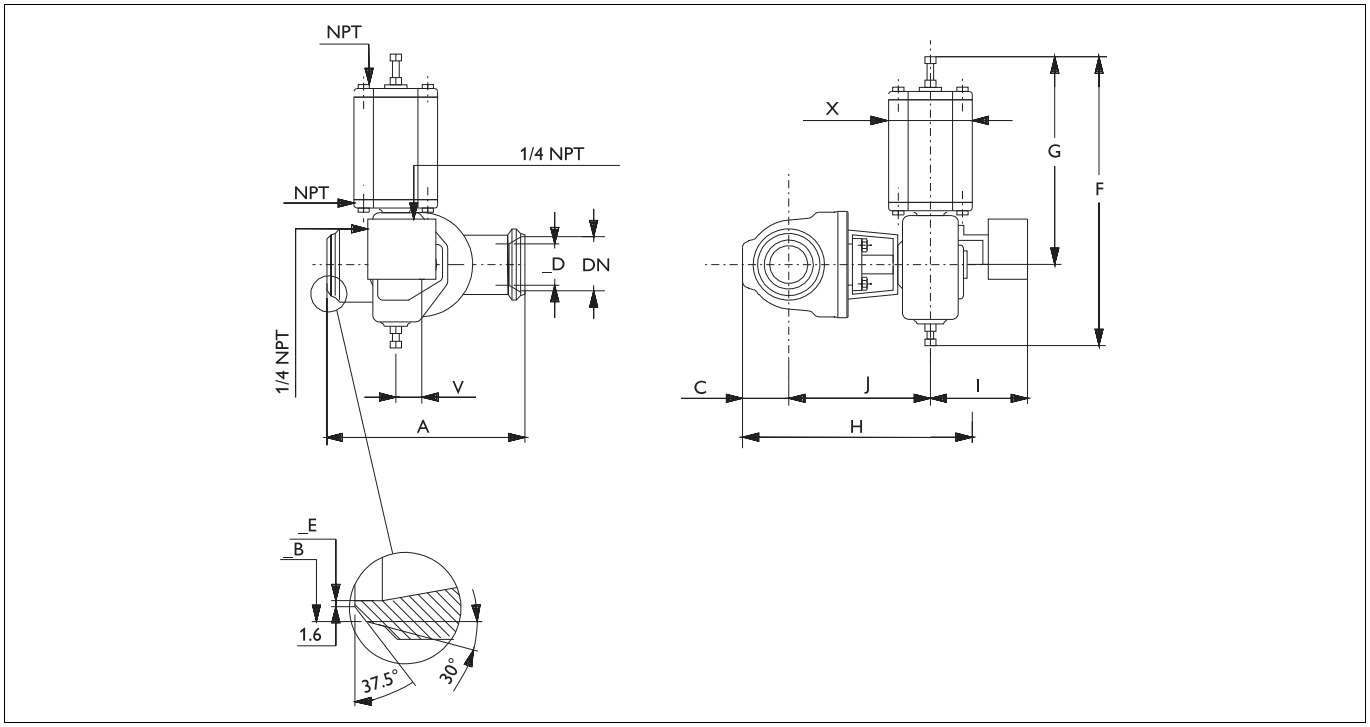
Type	DN	A	_B	_D	F	G	H	I	J	V	X	NPT	kg
T5F01 - B1J/B1JA6	25	210	124	25	485	368	313	219	191	36	110	3/8	24
T5F01 - B1J/B1JA8	25	210	124	25	560	420	320	220	192	43	135	3/8	28
T5F01 - B1J10	25	210	124	25	650	490	350	225	198	51	175	3/8	41
T5F015 - B1J/B1JA8	40	251	155.4	38	560	420	380	220	225	43	135	3/8	34
T5F015 - B1J/B1JA10	40	251	155.4	38	650	490	395	225	230	51	175	3/8	47
T5F015 - B1J12	40	251	155.4	38	800	620	440	235	255	65	215	1/2	74
T5F02 - B1J/B1JA8	50	286	165.1	38	560	420	385	220	225	43	135	3/8	38
T5F02 - B1J/B1JA10	50	286	165.1	38	650	490	400	225	230	51	175	3/8	51
T5F02 - B1J12	50	286	165.1	38	800	620	445	235	255	65	215	1/2	78
T5F03 - B1J/B1JA10	80	337	209.5	50	650	490	440	225	245	51	175	3/8	66
T5F03 - B1J/B1JA12	80	337	209.5	50	800	620	475	235	260	65	215	1/2	93
T5F03 - B1J/B1JA16	80	337	209.5	50	990	760	515	255	275	78	265	1/2	136
T5F04 - B1J/B1JA12	100	394	273.1	76	800	620	550	235	303	65	215	1/2	126
T5F04 - B1J/B1JA16	100	394	273.1	76	990	760	585	255	315	78	265	1/2	169
T5F04 - B1J/B1JA20	100	394	273.1	76	1200	935	670	270	337	97	395	3/4	244
T5F06 - B1J/B1JA16	150	508	355.6	102	990	760	690	255	378	78	265	1/2	247
T5F06 - B1J/B1JA20	150	508	355.6	102	1200	935	770	270	395	97	395	3/4	322
T5F06 - B1J/B1JA25	150	508	355.6	102	1530	1200	845	310	415	121	505	3/4	497
T5F08 - B1J/B1JA20	200	610	419.1	125	1200	935	850	270	440	97	395	3/4	467
T5F08 - B1J/B1JA25	200	610	419.1	125	1530	1200	930	310	465	121	505	3/4	637
T5F08 - B1J/B1JA32	200	610	419.1	125	1830	1410	985	350	505	153	540	1	957
T5F10 - B1J/B1JA20	250	752	508	152	1200	935	900	270	445	97	395	3/4	578
T5F10 - B1J/B1JA25	250	752	508	152	1530	1200	990	310	480	121	505	3/4	753
T5F10 - B1J/B1JA32	250	752	508	152	1830	1410	1040	350	515	153	540	1	1073
T5F12 - B1J/B1JA25	300	819	558.8	202	1530	1200	1070	310	539	121	505	3/4	963
T5F12 - B1J/B1JA32	300	819	558.8	202	1830	1410	1125	350	576	153	540	1	1283
T5F14 - B1J/B1JA32	350	927	603.3	254	1830	1410	1330	350	755	153	540	1	1793
T5F16 - B1J/B1JA32	400	1108	685.8	254	1830	1410	1370	350	755	153	540	1	1898

T25F-BC, B1C

Type	DN	A	_B	_D	F	G	H	I	J	V	X	NPT	kg
T25F02 - B1C11	50	292	165.1	50	540	375	410	225	245	51	135	3/8	53
T25F02 - B1C13	50	292	165.1	50	635	445	440	235	260	65	175	3/8	68
T25F03 - B1C13	80	356	209.5	76	635	445	500	235	300	65	175	3/8	107
T25F03 - B1C17	80	356	209.5	76	770	545	530	255	315	78	215	1/2	130
T25F03 - B1C20	80	356	209.5	76	840	575	570	270	337	97	215	1/2	145
T25F04 - B1C17	100	432	273.1	102	770	545	625	255	375	78	215	1/2	205
T25F04 - B1C20	100	432	273.1	102	840	575	660	270	397	97	215	1/2	218
T25F04 - B1C25	100	432	273.1	102	1040	710	715	310	415	121	265	1/2	285
T25F06 - B1C25	150	559	355.6	152	1040	710	820	310	480	121	265	1/2	445
T25F06 - B1C32	150	559	355.6	152	1330	910	895	350	515	153	395	3/4	565
T25F06 - B1C40	150	559	355.6	152	1660	1150	995	370	565	194	505	3/4	760
T25F08 - B1C25	200	660	419.1	202	1040	710	910	310	539	121	265	1/2	630
T25F08 - B1C32	200	660	419.1	202	1330	910	990	350	576	153	395	3/4	770
T25F08 - B1C40	200	660	419.1	202	1660	1150	1090	370	626	194	505	3/4	970
T25F10 - B1C32	250	787	508.0	254	1330	910	1210	350	755	153	395	3/4	1080
T25F10 - B1C40	250	787	508.0	254	1660	1150	1315	370	805	194	505	3/4	1270
T25F10 - B1C50	250	787	508.0	254	1970	1350	1415	415	855	242	610	1	1660

T25F-BJ/BJA, B1J/B1JA

Type	DN	A	_B	_D	F	G	H	I	J	V	X	NPT	kg
T25F02 - B1J/B1JA10	50	292	165.1	50	650	490	415	225	245	51	175	3/8	67
T25F02 - B1J/B1JA12	50	292	165.1	50	800	620	450	235	260	65	215	1/2	95
T25F02 - B1J/B1JA16	50	292	165.1	50	990	760	490	255	275	78	265	1/2	140
T25F03 - B1J/B1JA12	80	356	209.5	76	800	620	515	235	303	65	215	1/2	129
T25F03 - B1J/B1JA16	80	356	209.5	76	990	760	555	255	315	78	265	1/2	175
T25F03 - B1J/B1JA20	80	356	209.5	76	1200	935	640	270	335	97	395	3/4	250
T25F04 - B1J/B1JA16	100	432	273.1	102	990	760	650	255	378	78	265	1/2	245
T25F04 - B1J/B1JA20	100	432	273.1	102	1200	935	730	270	395	97	395	3/4	330
T25F04 - B1J/B1JA25	100	432	273.1	102	1530	1200	805	310	415	121	505	3/4	500
T25F06 - B1J/B1JA20	150	559	355.6	152	1200	935	820	270	445	97	395	3/4	480
T25F06 - B1J/B1JA25	150	559	355.6	152	1530	1200	910	310	480	121	505	3/4	660
T25F06 - B1J/B1JA32	150	559	355.6	152	1830	1410	965	350	515	153	540	1	980
T25F08 - B1J/B1JA25	200	660	419.1	202	1530	1200	1005	310	539	121	505	3/4	860
T25F08 - B1J/B1JA32	200	660	419.1	202	1830	1410	1060	350	576	153	540	1	1180
T25F10 - B1J/B1JA32	250	787	508	254	1830	1410	1280	350	755	153	540	1	1490



T4D-BC, B1C

Type	DN	A	_B	C	_D	_E	F	G	H	I	J	V	X	NPT	kg
T4D01 - B1C6	25	210	36	38	25	26.6	400	260	275	215	191	36	90	1/4	20
T4D01 - B1C9	25	210	36	38	25	26.6	455	315	365	220	192	43	110	1/4	26
T4D015 - B1C6	40	251	52	60	38	40.6	400	260	365	215	223	51	135	1/4	22
T4D015 - B1C9	40	251	52	60	38	40.6	455	315	360	220	225	43	110	1/4	27
T4D015 - B1C11	40	251	52	60	38	40.6	540	375	370	225	230	51	135	3/8	33
T4D02 - B1C6	50	292	62	60	38	52.5	400	260	365	215	223	43	110	1/4	22
T4D02 - B1C9	50	292	62	60	38	52.5	455	315	360	220	225	43	110	1/4	30
T4D02 - B1C11	50	292	62	60	38	52.5	540	375	370	225	230	51	135	3/8	36
T4D03 - B1C11	80	356	91	68	50	77.9	540	375	395	225	245	51	135	3/8	50
T4D03 - B1C13	80	356	91	68	50	77.9	635	445	425	235	260	65	175	3/8	65
T4D04 - B1C13	100	432	117	90	76	102.3	635	445	425	235	300	65	175	3/8	100
T4D04 - B1C17	100	432	117	90	76	102.3	770	545	515	255	315	78	215	1/2	125
T4D04 - B1C20	100	432	117	90	76	102.3	840	575	552	270	337	97	215	1/2	205
T4D06 - B1C17	150	559	172	122	102	154.1	770	545	610	255	375	78	215	1/2	185
T4D06 - B1C20	150	559	172	122	102	154.1	840	575	645	270	397	97	215	1/2	198
T4D06 - B1C25	150	559	172	122	102	154.1	1040	710	700	310	415	121	265	1/2	265
T4D08 - B1C20	200	660	223	140	125	202.7	840	575	705	270	440	97	265	1/2	283
T4D08 - B1C25	200	660	223	140	125	202.7	1040	710	765	310	465	121	265	1/2	350
T4D08 - B1C32	200	660	223	140	125	202.7	1330	910	845	350	505	153	395	3/4	480
T4D10 - B1C25	250	787	278	170	152	254.4	1040	710	810	310	480	121	265	1/2	425
T4D10 - B1C32	250	787	278	170	152	254.4	1330	910	885	350	515	153	395	3/4	545
T4D10 - B1C40	250	787	278	170	152	254.4	1660	1150	995	370	565	194	505	3/4	735
T4D12 - B1C25	300	838	329	210	202	303.2	1040	710	960	310	539	121	265	1/2	605
T4D12 - B1C32	300	838	329	210	202	303.2	1330	910	990	350	576	153	395	3/4	745
T4D12 - B1C40	300	838	329	210	202	303.2	1660	1150	1090	370	626	194	505	3/4	945
T4D14 - B1C32	350	889	362	275	254	333.4	1330	910	1230	350	755	153	395	3/4	1210
T4D14 - B1C40	350	889	362	275	254	333.4	1660	1150	1335	370	805	194	505	3/4	1400
T4D14 - B1C50	350	889	362	275	254	333.4	1970	1350	1435	415	855	242	610	1	1790
T4D16 - B1C32	400	991	413	275	254	381.0	1330	910	1230	350	755	153	395	3/4	1260
T4D16 - B1C40	400	991	413	275	254	381.0	1660	1150	1335	370	805	194	505	3/4	1450
T4D16 - B1C50	400	991	413	275	254	381.0	1970	1350	1435	415	855	242	610	1	1840

T4F-BC, B1C

Type	DN	A	_B	C	_D	_E	F	G	H	I	J	V	X	NPT	kg
T4F01 - B1C6	25	210	36	38	25	24.4	400	260	275	215	191	36	90	1/4	20
T4F01 - B1C9	25	210	36	38	25	24.4	455	315	365	220	192	43	110	1/4	26
T4F015 - B1C6	40	251	52	60	38	37.8	400	260	365	225	223	51	135	1/4	22
T4F015 - B1C9	40	251	52	60	38	37.8	455	315	360	220	225	43	110	1/4	27
T4F015 - B1C11	40	251	52	60	38	37.8	540	375	370	225	230	51	135	3/8	33
T4F02 - B1C6	50	292	62	60	38	49.3	400	260	365	225	223	51	135	1/4	22
T4F02 - B1C9	50	292	62	60	38	49.3	455	315	360	220	225	43	110	1/4	30
T4F02 - B1C11	50	292	62	60	38	49.3	540	375	370	225	230	51	135	3/8	36
T4F03 - B1C11	80	356	91	68	50	73.7	540	375	395	225	245	51	135	3/8	50
T4F03 - B1C13	80	356	91	68	50	73.7	635	445	425	235	260	65	175	3/8	65
T4F04 - B1C13	100	432	117	90	76	97.1	635	445	425	235	303	65	175	3/8	100
T4F04 - B1C17	100	432	117	90	76	97.1	770	545	515	255	315	78	215	1/2	125
T4F04 - B1C20	100	432	117	90	76	97.1	840	575	552	270	337	97	215	1/2	205
T4F06 - B1C17	150	559	172	122	102	146.3	770	545	610	255	375	78	215	1/2	185
T4F06 - B1C20	150	559	172	122	102	146.3	840	575	645	270	397	97	215	1/2	198
T4F06 - B1C25	150	559	172	122	102	146.3	1040	710	700	310	415	121	265	1/2	265
T4F08 - B1C20	200	660	223	140	125	188.9	840	575	705	270	440	97	265	1/2	283
T4F08 - B1C25	200	660	223	140	125	188.9	1040	710	765	310	465	121	265	1/2	350
T4F08 - B1C32	200	660	223	140	125	188.9	1330	910	845	350	505	153	395	3/4	480
T4F10 - B1C25	250	787	278	170	152	242.8	1040	710	810	310	480	121	265	1/2	425
T4F10 - B1C32	250	787	278	170	152	242.8	1330	910	885	350	515	153	395	3/4	545
T4F10 - B1C40	250	787	278	170	152	242.8	1660	1150	955	370	565	194	505	3/4	735
T4F12 - B1C25	300	838	329	210	202	288.8	1040	710	960	310	539	121	265	1/2	605
T4F12 - B1C32	300	838	329	210	202	288.8	1330	910	990	350	576	153	395	3/4	745
T4F12 - B1C40	300	838	329	210	202	288.8	1660	1150	1090	370	626	194	505	3/4	945
T4F14 - B1C32	350	889	362	275	254	317.6	1330	910	1230	350	755	153	395	3/4	1210
T4F14 - B1C40	350	889	362	275	254	317.6	1660	1150	1335	370	805	194	505	3/4	1400
T4F14 - B1C50	350	889	362	275	254	317.6	1970	1350	1435	415	855	242	610	1	1790
T4F16 - B1C32	400	991	413	275	254	363.6	1330	910	1230	350	755	153	395	3/4	1260
T4F16 - B1C40	400	991	413	275	254	363.6	1660	1150	1335	370	805	194	505	3/4	1450
T4F16 - B1C50	400	991	413	275	254	363.6	1970	1350	1435	415	855	242	610	1	1840

T4D-BJ/BJA, B1J/B1JA

Type	DN	A	_B	C	_D	_E	F	G	H	I	J	V	X	NPT	kg
T4D01 - B1J/B1JA6	25	210	36	38	25	26.6	485	368	303	219	191	36	110	3/8	29
T4D01 - B1J/B1JA8	25	210	36	38	25	26.6	560	420	305	220	192	43	135	3/8	33
T4D01 - B1J10	25	210	36	38	25	26.6	650	490	325	225	198	51	175	3/8	45
T4D015 - B1J/B1JA8	40	251	52	60	38	40.6	560	420	360	220	225	43	135	3/8	34
T4D015 - B1J/B1JA10	40	251	52	60	38	40.6	650	490	380	225	230	51	175	3/8	47
T4D015 - B1J12	40	251	52	60	38	40.6	800	620	425	235	255	65	215	1/2	74
T4D02 - B1J/B1JA8	50	292	62	60	38	52.5	560	420	360	220	225	43	135	3/8	37
T4D02 - B1J/B1JA10	50	292	62	60	38	52.5	650	490	380	225	230	51	175	3/8	50
T4D02 - B1J12	50	292	62	60	38	52.5	800	620	425	235	255	65	215	1/2	78
T4D03 - B1J/B1JA10	80	356	91	68	50	77.9	650	490	400	225	245	51	175	3/8	64
T4D03 - B1J/B1JA12	80	356	91	68	50	77.9	800	620	435	235	260	65	215	1/2	92
T4D03 - B1J/B1JA16	80	356	91	68	50	77.9	990	760	475	255	275	78	265	1/2	137
T4D04 - B1J/B1JA12	100	432	117	90	76	102.3	800	620	500	235	303	65	215	1/2	122
T4D04 - B1J/B1JA16	100	432	117	90	76	102.3	990	760	540	255	315	78	265	1/2	175
T4D04 - B1J/B1JA20	100	432	117	90	76	102.3	1200	935	625	270	337	97	395	3/4	245
T4D06- B1J/B1JA16	150	559	172	122	102	154.1	990	760	635	255	378	78	265	1/2	225
T4D06 - B1J/B1JA20	150	559	172	122	102	154.1	1200	935	715	270	395	97	395	3/4	300
T4D06 - B1J/B1JA25	150	559	172	122	102	154.1	1530	1200	790	310	415	121	505	3/4	485
T4D08 - B1J/B1JA20	200	660	223	140	125	202.7	1200	935	765	270	425	97	395	3/4	395
T4D08 - B1J/B1JA25	200	660	223	140	125	202.7	1530	1200	860	310	465	121	505	3/4	570
T4D08 - B1J/B1JA32	200	660	223	140	125	202.7	1830	1410	915	350	505	153	540	1	890
T4D10 - B1J/B1JA20	250	787	278	170	152	254.4	1200	935	815	270	445	97	395	3/4	450
T4D10 - B1J/B1JA25	250	787	278	170	152	254.4	1530	1200	905	310	480	121	505	3/4	645
T4D10 - B1J/B1JA32	250	787	278	170	152	254.4	1830	1410	955	350	515	153	540	1	965
T4D12 - B1J/B1JA25	300	838	329	210	202	303.2	1530	1200	1005	310	539	121	505	3/4	845
T4D12 - B1J/B1JA32	300	838	329	210	202	303.2	1830	1410	1060	350	576	153	540	1	1165
T4D14 - B1J/B1JA32	350	889	362	275	254	333.4	1830	1410	1300	350	755	153	540	1	1530
T4D16 - B1J/B1JA32	400	991	413	275	254	381.0	1830	1410	1300	350	755	153	540	1	1680

T4F-BJ/BJA, B1J/B1JA

Type	DN	A	_B	C	_D	_E	F	G	H	I	J	V	X	NPT	kg
T4F01 - B1J/B1JA6	25	210	36	38	25	24.4	485	368	303	219	191	36	110	3/8	29
T4F01 - B1J/B1JA8	25	210	36	38	25	24.4	560	420	305	220	192	43	135	3/8	33
T4F01 - B1J10	25	210	36	38	25	24.4	650	490	325	225	198	51	175	3/8	45
T4F015 - B1J/B1JA8	40	251	52	60	38	37.8	560	420	360	220	225	43	135	3/8	34
T4F015 - B1J/B1JA10	40	251	52	60	38	37.8	650	490	380	225	230	51	175	3/8	47
T4F015 - B1J12	40	251	52	60	38	37.8	800	620	425	235	255	65	215	1/2	74
T4F02 - B1J/B1JA8	50	292	62	60	38	49.3	560	420	360	220	225	43	135	3/8	37
T4F02 - B1J/B1JA10	50	292	62	60	38	49.3	650	490	380	225	230	51	175	3/8	50
T4F02 - B1J12	50	292	62	60	38	49.3	800	620	425	235	255	65	215	1/2	78
T4F03 - B1J/B1JA10	80	356	91	68	50	73.7	650	490	400	225	245	51	175	3/8	64
T4F03 - B1J/B1JA12	80	356	91	68	50	73.7	800	620	435	235	260	65	215	1/2	92
T4F03 - B1J/B1JA16	80	356	91	68	50	73.7	990	760	475	255	275	78	265	1/2	137
T4F04 - B1J/B1JA12	100	432	117	90	76	97.1	800	620	500	235	303	65	215	1/2	122
T4F04 - B1J/B1JA16	100	432	117	90	76	97.1	990	760	540	255	315	78	265	1/2	175
T4F04 - B1J/B1JA20	100	432	117	90	76	97.1	1200	935	625	270	337	97	395	3/4	245
T4F06 - B1J/B1JA16	150	559	172	122	102	146.3	990	760	635	255	378	78	265	1/2	225
T4F06 - B1J/B1JA20	150	559	172	122	102	146.3	1200	935	715	270	395	97	395	3/4	300
T4F06 - B1J/B1JA25	150	559	172	122	102	146.3	1530	1200	790	310	415	121	505	3/4	485
T4F08 - B1J/B1JA20	200	660	223	140	125	188.9	1200	935	765	270	425	97	395	3/4	395
T4F08 - B1J/B1JA25	200	660	223	140	125	188.9	1530	1200	860	310	465	121	505	3/4	570
T4F08 - B1J/B1JA32	200	660	223	140	125	188.9	1830	1410	915	350	505	153	540	1	890
T4F10 - B1J/B1JA20	250	787	278	170	152	242.8	1200	935	815	270	445	97	395	3/4	450
T4F10 - B1J/B1JA25	250	787	278	170	152	242.8	1530	1200	905	310	480	121	505	3/4	645
T4F10 - B1J/B1JA32	250	787	278	170	152	242.8	1830	1410	955	350	515	153	540	1	965
T4F12 - B1J/B1JA25	300	838	329	210	202	288.8	1530	1200	1005	310	539	121	505	3/4	845
T4F12 - B1J/B1JA32	300	838	329	210	202	288.8	1830	1410	1060	350	576	153	540	1	1165
T4F14 - B1J/B1JA32	350	889	362	275	254	317.6	1830	1410	1300	350	755	153	540	1	1530
T4F16 - B1J/B1JA32	400	991	413	275	254	363.6	1830	1410	1300	350	755	153	540	1	1680

T35F-BC, B1C

Type	DN	A	_B	C	_D	_E	F	G	H	I	J	V	X	NPT	kg
T35F02 - B1C11	50	292	91	68	50	73.7	540	375	375	225	245	51	135	3/8	49
T35F02 - B1C13	50	292	91	68	50	73.7	635	445	425	235	260	65	175	3/8	63
T35F03 - B1C13	80	356	117	90	76	97.1	635	445	485	235	300	65	175	3/8	97
T35F03 - B1C17	80	356	117	90	76	97.1	770	545	515	255	315	78	215	1/2	120
T35F03 - B1C20	80	356	117	90	76	97.1	840	575	550	270	337	97	215	1/2	135
T35F04 - B1C17	100	432	172	122	102	146.3	770	545	610	255	375	78	215	1/2	185
T35F04 - B1C20	100	432	172	122	102	146.3	840	575	645	270	397	97	215	1/2	203
T35F04 - B1C25	100	432	172	122	102	146.3	1040	710	700	310	415	121	265	1/2	265
T35F06 - B1C25	150	559	278	170	152	242.8	1040	710	810	310	480	121	265	1/2	415
T35F06 - B1C32	150	559	278	170	152	242.8	1330	910	885	350	515	153	395	3/4	535
T35F06 - B1C40	150	559	278	170	152	242.8	1660	1150	990	370	565	194	505	3/4	730
T35F08 - B1C25	200	660	329	210	202	288.8	1040	710	910	310	539	121	265	1/2	595
T35F08 - B1C32	200	660	329	210	202	288.8	1330	910	990	350	576	153	395	3/4	725
T35F08 - B1C40	200	660	329	210	202	288.8	1660	1150	1090	370	626	194	505	3/4	920
T35F10 - B1C32	250	787	362	275	254	317.6	1330	910	1230	350	755	153	395	3/4	1010
T35F10 - B1C40	250	787	362	275	254	317.6	1660	1150	1335	370	805	194	505	3/4	1205
T35F10 - B1C50	250	787	362	275	254	317.6	1970	1350	1435	415	855	242	610	1	1590

T35F-BJ/BJA, B1J/B1JA

Type	DN	A	_B	C	_D	_E	F	G	H	I	J	V	X	NPT	kg
T35F02 - B1J/B1JA10	50	292	91	68	50	73.7	650	490	400	225	245	51	175	3/8	63
T35F02 - B1J/B1JA12	50	292	91	68	50	73.7	800	620	435	235	260	65	215	1/2	92
T35F02 - B1J/B1JA16	50	292	91	68	50	73.7	990	760	475	255	275	78	265	1/2	135
T35F03 - B1J/B1JA12	80	356	117	90	76	97.1	800	620	500	235	303	65	215	1/2	119
T35F03 - B1J/B1JA16	80	356	117	90	76	97.1	990	760	540	255	315	78	265	1/2	165
T35F03 - B1J/B1JA20	80	356	117	90	76	97.1	1200	935	625	270	335	97	395	3/4	240
T35F04 - B1J/B1JA16	100	432	172	122	102	146.3	990	760	635	255	378	78	265	1/2	230
T35F04 - B1J/B1JA20	100	432	172	122	102	146.3	1200	935	715	270	395	97	395	3/4	315
T35F04 - B1J/B1JA25	100	432	172	122	102	146.3	1530	1200	790	310	415	121	505	3/4	485
T35F06 - B1J/B1JA20	150	559	278	170	152	242.8	1200	935	815	270	445	97	395	3/4	445
T35F06 - B1J/B1JA25	150	559	278	170	152	242.8	1530	1200	905	310	480	121	505	3/4	635
T35F06- B1J/B1JA32	150	559	278	170	152	242.8	1830	1410	955	350	515	153	540	1	945
T35F08 - B1J/B1JA25	200	660	329	210	202	288.8	1530	1200	1005	310	539	121	505	3/4	825
T35F08 - B1J/B1JA32	200	660	329	210	202	288.8	1830	1410	1060	350	576	153	540	1	1145
T35F10 - B1J/B1JA32	250	787	362	275	254	317.6	1830	1410	1300	350	755	153	540	1	1430

14 TYPE CODING

TOP ENTRY ROTARY VALVE, Series Top 5

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.		11.
	T5	**F**	**B**	**04**	**A**	**A**	**F**	**03**		**/**	**-**

1.	**PRODUCT DESIGN Q- TRIM and V-PORT OPTIONS**
Q	Low noise trim for gas and liquid applications (in sizes NPS 08" and larger).
QX	Multichannel Q-ball for gas and liquid applications. (in sizes NPS 06" and smaller)
Q2G	Q2-trim for gas applications
Q2GH	Q2-trim for gas applications, high capacity version
QA	Low noise trim + attenuator plate in downstream flow port of body for gas applications. (in sizes NPS 08" and larger).
QXA	Multichannel Q-ball + attenuator plate in downstream flow port of body for gas applications. (in sizes NPS 06" and smaller).
A	Attenuator plate in downstream flow port of body for gas application *
QXR	Reduced capacity multichannel Q-ball for gas and liquid applications. (in sizes NPS 06" and smaller)
QRA	Reduced capacity multichannel Q-ball + attenuator plate in downstream flow port of body for gas applications. (in sizes NPS 06" and smaller).
V_ _	V-port (only for T5/T4 1", 1 1/2", 2"/DN 25, 40, 50).

*) For liquid applications customized baffle plates are used. Code "A" must be replaced with "Y" and explanation must be given.

2.	**SERIES / DESIGN**
	T5 SERIES **Top entry body, trunnion mounted**
T5	Reduced bore, flanged, single seated, face-to-face lenght acc. to IEC 534-3 and ANSI/ISA S75.03-1985.
T4	Reduced bore 2" - 16", full bore 1" & 11/2", weld-ends.
T25	Full bore, flanged. OBSOLETE
T35	Full bore, weld ends, OBSOLETE

3.	**PRESSURE RATING**
C	ASME Class 150, face-to-face is according to Class 300
D	ASME Class 300
F	ASME Class 600
L	PN 25, DIN 2544, size 08" and bigger (sizes 01" - 06", use PN40)
M	PN 40, DIN 2545, size 01" and bigger
N	PN 63, DIN 2546, size 02" and bigger (sizes 01" and 1H", use PN100)
P	PN 100, DIN 2547, size 01" and bigger
U	JIS 30K
W	JIS 40K
Z	JIS 63K

4.	**CONSTRUCTION**
E	General, PTFE bearings. Temperature range -50 °C ... +230 °C.
B	High and low temperature, metal bearings. Temperature range -50 °C...+450 °C.
C	Cryogenic, metal or PTFE bearings F-seat only. Temperature ranges: PTFE bearings -200 to +230 °C and metal bearings -200 to +400 °C.
Z	OXYGEN CONSTRUCTION BAM tested non-metallic materials - T = -50 °C… +200 °C - Max pressure based on body rating - Metal bearings, cobalt based alloy - seat type F, WC-Co coated ball and seats - Oxygen cleaning acc. to Metso internal procedure

5.	**SIZE**										
	inch(es)	1	1,5	2	3	4	6	8	10	12	14	16
	code	01	015	02	03	04	06	08	10	12	14	16

6.	**BODY**	**BOLTING**
A	CF8M	B8M / 8M
D	WCB	L7M / 2HM

7.	**BALL**
A	CF8M + hard chrome with metal seats
D	CF8M + NiBo
R1	CF8M / AISI 316 + WC-Co, Dry gas, high pressure, T < 400 °C
R3	CF8M / AISI 316 + CrC, High temperature, T > 400 °C

8.	**SEAT**
A	Metal seat, T= -50 ... +450 °C. General service and fire safe applications.
E	Metal seat for control service. T= -50...+450 °C. Ejector style seat, lower torque in modulating control.
F	Bellows seat, T= -200 ... +400 °C (600 °C). Shut-off applications at low and high temperatures.
R	Standard soft seat, T= -30 ... +100 °C. Control and shut-off applications for high pressure gas.

9.	**Seat seal**	**Bonnet gasket**	**Gland packing**	**Spring / Bellows**	**Bearings**
02	Graphite, (seat A or E)	Graphite	Graphite	Inconel X-750 / W.no. 1.4418	PTFE
03	Graphite, (seat A or E)	Graphite	Graphite	Inconel X-750 / W.no. 1.4418	Metal
63	Viton G O-ring and Graphite (seat R)	Graphite	Graphite	Inconel X-750	PTFE or metal

10.	**GLAND PACKING OPTION**
G	Standard, Live loaded graphite packing,
G1	Live loaded graphite packing, ISO 15848-1 certified construction.
-	Without sign, Graphite packing

11.	**FLANGE FACING**
-	ASME B16.5 Raised Face (Ra 3.2-6.3) EN 1092-1 Type B1 (Ra 3.2 - 12.5) without sign
05	ASME B16.5 Ring Joint

12.	**CONSTRUCTION CODE**
+D	Drain plug

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