

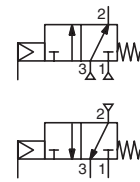


# VALVES

pressure operated  
stainless steel body

with flanges PN40, DIN and ANSI Class 300, DN 15 to 50

U



3/2  
Series  
T398

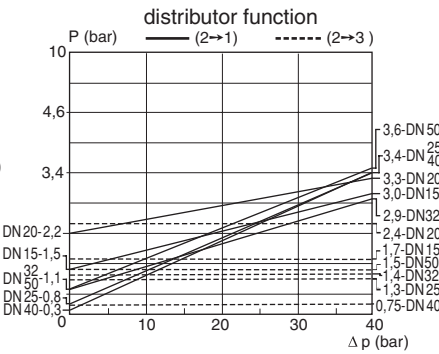
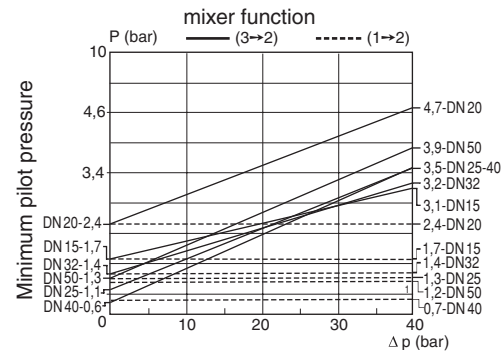
## FEATURES

- Ruggedly built valve, particularly recommended for use with steam, superheated water, corrosive fluids
- High-performance, maintenance-free stuffing box, resistant to thermal shock
- Mixer function (two pressure inlets at 1 or 3, one outlet at 2) or distributor function (one pressure inlet at 2, two outlets at 1 and 3)
- Vacuum operation up to  $10^{-2}$  mbar
- Allowable backpressure: up to 40 bar
- Optical position indicator as standard
- Autoclavable valve for use at high ambient temperatures (up to 180°C)
- The valves satisfy Pressure Equipment Directive 2014/64/EU
- The valves in conformity with IEC 61508 Standard (2010 route 2<sub>H</sub> version) certified with integrity levels: SIL 2 for HFT = 0

## GENERAL

Differential pressure	0 to 40 bar [1 bar = 100 kPa]
Maximum allowable pressure	40 bar (within the specified limits, see diagram I)
Ambient temperature range	-25°C to +180°C
Maximum viscosity	5000 cSt (mm <sup>2</sup> /s)
Pilot fluid	Air
Max. pilot pressure	10 bar
Min. pilot pressure	See below

fluids (*)	temperature range	disc seal (*)
DN 15-20-25: air and gas groups 1 & 2 DN 32-40-50: air and gas group 2 all DN: water, oil, liquids groups 1 & 2 and steam	- 10°C to + 250°C	bronze PTFE



## SPECIFICATIONS

**Connection** Flanges PN40, type 21 (ISO 7005 / EN 1092)  
ANSI Class 300 ANSI B16-5

**Face-to-face dimensions** EN 558-1

**Facing** Type B

## MATERIALS IN CONTACT WITH FLUID

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified

**Body and plug** Stainless steel

**Stuffing box housing** Stainless steel

**Stem, disc** Stainless steel

**Stuffing box packing** PTFE chevrons

**Disc seal** Bronze PTFE

**Valve body seal** Graphite

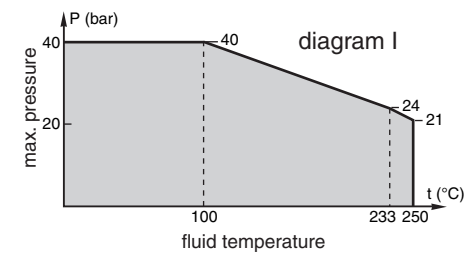
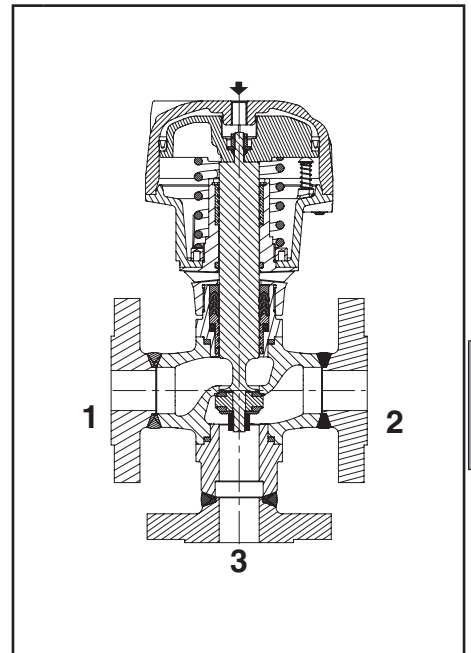
## OTHER MATERIALS

**Operator** Aluminium, nickel plated

## SPECIFICATIONS

DN	orifice size	flow coefficient Kv								pilot pressure (bar)		operating pressure differential (bar)	operator diameter (mm)	catalogue number		
		mixer				distributor				min.	max.			DIN	ANSI 300	
		3→2	1→2	2→3	2→1	(m <sup>3</sup> /h)	(l/min)	(m <sup>3</sup> /h)	(l/min)							
<b>U - Universal</b>																
15	15	3,3	54	4,4	73	3,5	59	4,6	78	*	10	40	80	T398A001	T398A007	
20	20	8,0	133	7,4	123	8,1	136	7,7	129	*	10	40	100	T398A002	T398A008	
25	25	11,4	190	11,6	194	12,1	203	11,9	199	*	10	40	100	T398A003	T398A009	
32	32	18,9	316	16,6	278	17,9	299	16,6	278	*	10	40	150	T398A004	T398A010	
40	40	27	450	27	450	27	450	27	450	*	10	40	150	T398A005	T398A011	
50	50	51	850	51	850	51	850	51	850	*	10	40	200	T398A006	T398A012	

\* Minimum pilot pressure varies with differential pressure. See piloting chart above.



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### OPTIONS AND ACCESSORIES

- Metal-to-metal sealing disc
- Signaling box, with mechanical or inductive contacts
- Low temperature: ambient -55°C to +70°C and fluid -55°C to +70°C
- ATEX 2014/34/EU versions for potentially explosive atmospheres, categories 2 GD and 3 GD
- 2 switches, Ex d protection, mounted on valve with 2 Crouzet contacts type 83101-I-W1, for use in ambient temperatures from -20°C to +80°C; suffix **SD2** [Contact us for option with 1 Honeywell contact type 1HS1 (-55°C to +82°C) or 1 Crouzet contact (-20°C to +80°C).]
- Valve seat leakage class VI as defined by FCI 70-2, contact us
- Other pipe connections are available on request

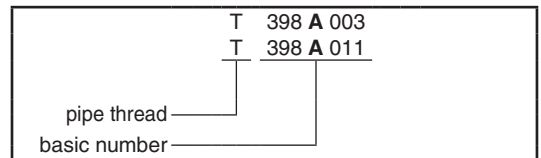
### INSTALLATION

- The valves can be mounted in any position without affecting operation
- Compatible with ASTM 1, 2 and 3 oils
- Check temperature range of valve body and solenoid pilot valves for suitability. For probability of failure, contact us
- Pipe connections (G\*) have standard thread according to ISO 228/1 and ISO 7/1. Pipe connections (G) have standard thread according to ISO 228/1
- Installation/maintenance instructions are included with each valve

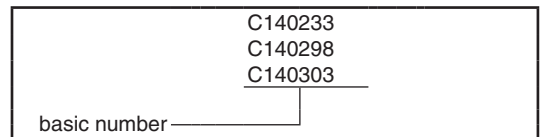
### SPARE PARTS KITS

catalogue number	spare parts kit no.		
	piston seal	actuator spring	stem, disc, seals
T398A001/007	<b>C140233</b>	<b>C140299</b>	<b>C140323</b>
T398A002/008	<b>C140234</b>	<b>C140301</b>	<b>C140324</b>
T398A003/009	<b>C140234</b>	<b>C140303</b>	<b>C140325</b>
T398A004/010	<b>C140235</b>	<b>C140305</b>	<b>C140326</b>
T398A005/011	<b>C140235</b>	<b>C140307</b>	<b>C140327</b>
T398A006/012	<b>C140298</b>	<b>C140309</b>	<b>C140328</b>

### ORDERING EXAMPLES:



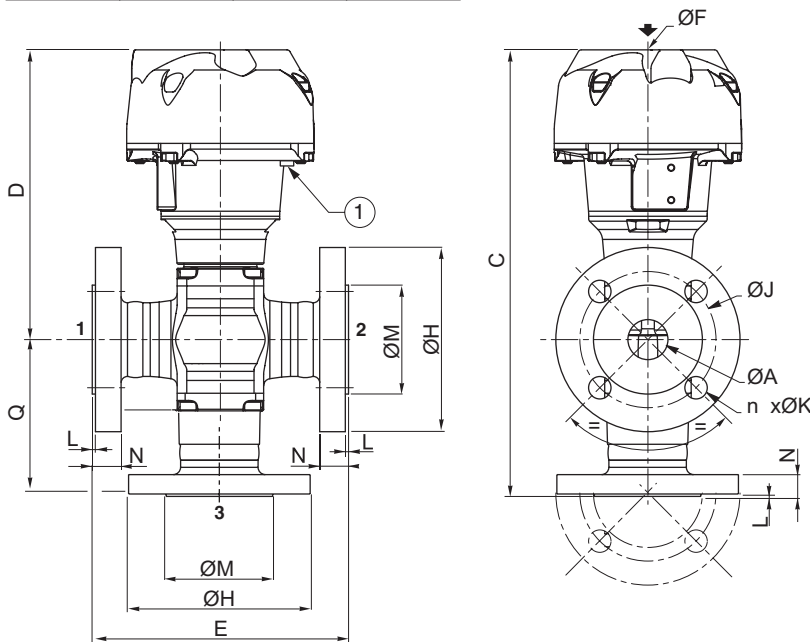
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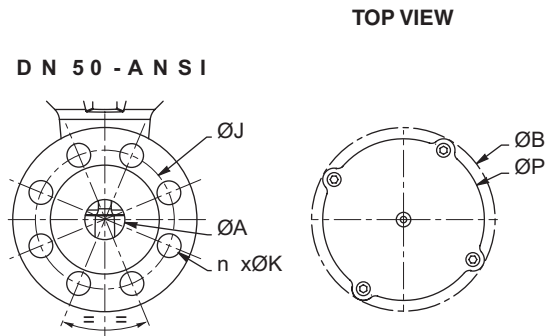
### DIMENSIONS (mm), WEIGHT (kg)



**TYPE 01-02-03-04**  
Prefix "T"



① Optical position indicator



type	DN	operator diameter	weight	
			DIN	ANSI
01	15	80	4,1	3,9
	20	100	6,7	7,2
02	25	100	8,1	8,7
	32	150	15,1	15,2
03	40	150	20,1	20,9
	50	200	33,9	34,3

type	DN	operator diameter	ØA	ØB	C		D	E		ØF	ØH		ØJ		n x ØK		L		ØM		N		ØP		Q	
					DIN	ANSI		DIN	ANSI		DIN	ANSI	DIN	ANSI	DIN	ANSI	DIN	ANSI	DIN	ANSI	DIN	ANSI	DIN	ANSI	DIN	ANSI
01	15	80	15	110	225,6	231,5	151,6	130	140	G 1/8	95	65	66,5	4 x 14	4 x 16	2	1,6	45	35	16	14,2	95	75	80		
02	20	100	20	132,5	256,9	275,9	170,9	150	170	G 1/8	105	120	82,5	4 x 14	4 x 19	2	1,6	58	43	18	15,8	117	95	100		
03	32	150	32	191	346,2	351,2	237,2	180	190	G* 1/4	140	135	100	98,5	4 x 18	4 x 19	2	1,6	78	64	18	19,1	172,5	109	114	
04	40	150	40	191	396,2	259,2	200	200	200	G* 1/4	150	155	110	114,5	4 x 18	4 x 22	2	1,6	88	73	18	20,6	172,5	137		
04	50	200	50	247	474	328,5	230	230	230	G* 1/4	165	125	127	127	4 x 18	8 x 19	2	1,6	102	92	20	22,4	230	145,5		