



3/2-way ball valve with electric quarter turn actuator, ball valve in stainless steel

- Suitable for aggressive media
- High flow rate valve
- Actuator with adjustable limit switches
- Visual position indicator
- Multiport versions on request

Type 2656 can be combined with...



Type 2655

Pneumatically actuated ball valve



Type 8326

Pressure transmitter



Type 8644

AirLINE electro-pneumatic valve bank

The electric ball valve Type 2656 consists of an electrical quarter turn actuator and a 2/2-way or 3/2-way ball valve made of stainless steel. This datasheet refers to the 3/2 way version with threaded ports. Weld, flanged and other port types are also available.

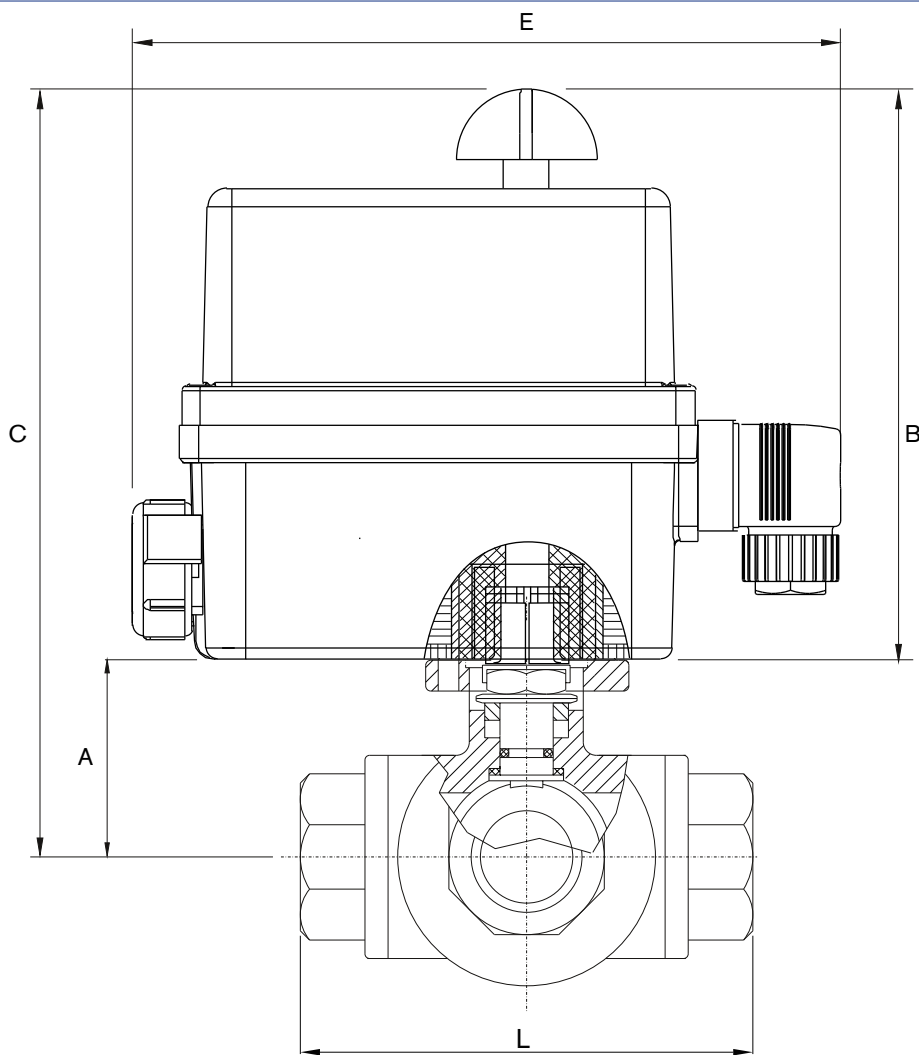
The quarter turn actuator is compactly built for various power options. One unit suits all quarter turn style valves. Alternatively the heavy duty Type 3005 electric actuator, for high torque and industrial applications, may be used. Contact Bürkert for more information.

Applications

- Universal application
- Water treatment
- Food & beverage
- General manufacturing

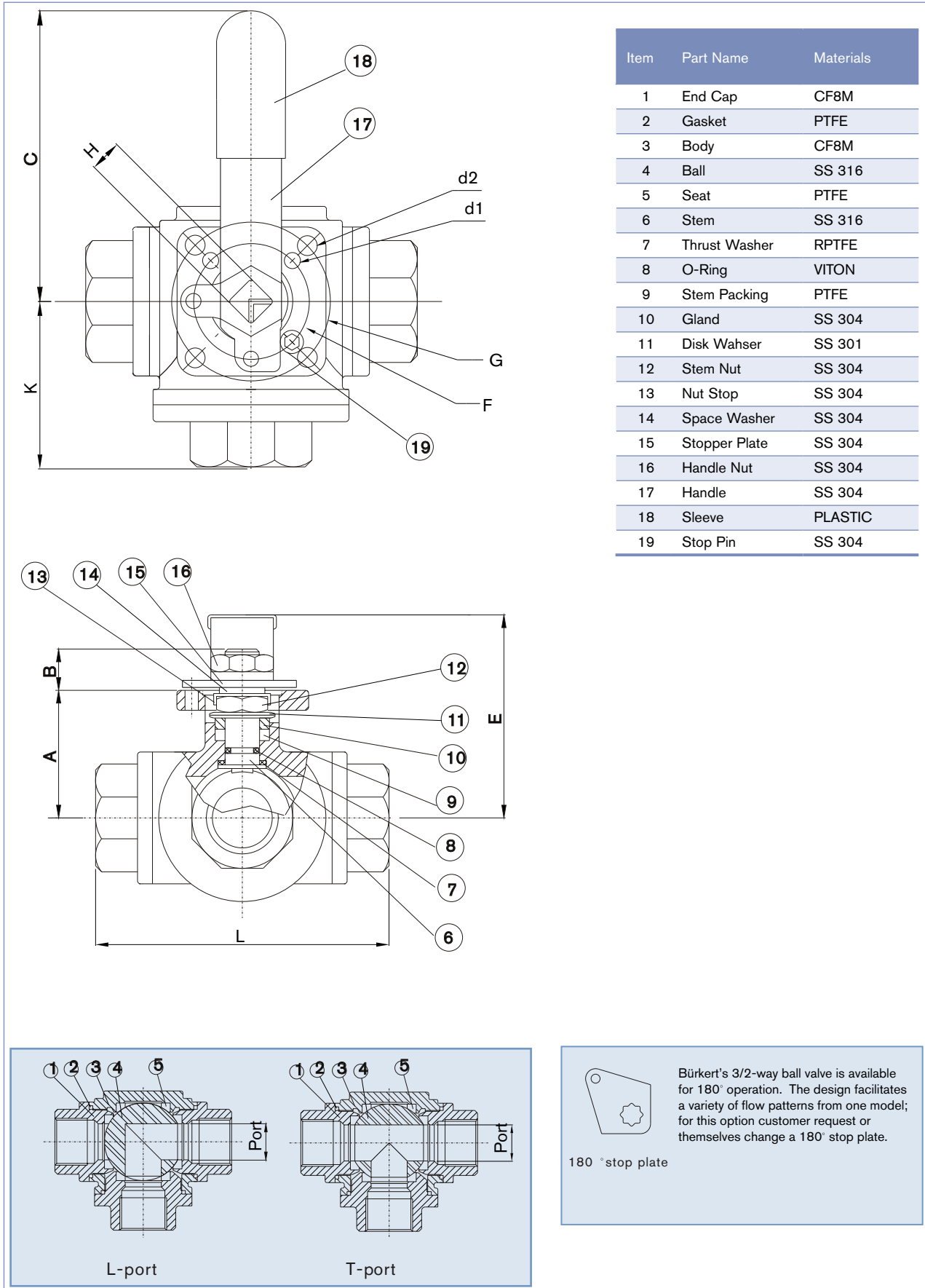
Technical data	
Body material	Stainless steel 1.4408
Seal material	PTFE
Medium	Gaseous and liquid media, which do not attack the housing and sealing materials
Medium temperature	-10 to +180°C (see valve pressure chart)
Ambient temperature	-10 to +55°C
Port connection	Threaded ports BSP Weld and flanged ported versions available
Operating pressure	0-70 bar
Connection between actuator and ball valve	Flange acc. to ISO 5211
Operating voltage	24 V AC/DC, 100-240 V AC / 50-60 Hz (Other voltages on request)
Voltage tolerance	DC: +/-20%; AC: +/-10%
Duty rating	At max. torque: 50% of the time
Electrical connection	2 cable glands ISO M20 (cable plug EN175301-803 on request)
Protection class	IP65
Rotation angle	90° (+/-5°)
Limit switches	4 adjustable - (2 for motor and 2 additional for feedback) max. 230 V / 5A
Elec. actuator material	Cover: ABS Body: PA Axis/Screws: Stainless steel gearbox: Steel, PC
Installation	Don't mount the actuator upside down

Valve dimensions [mm]



Valve Size	Actuator Size	Port	A	B	C	E	L
1/2"	20Nm	12	38.5	148.5	187	182	72
3/4"	20Nm	15	42	148.5	190.5	182	83
1"	35Nm	20	49	176.3	225.3	182	99
1 1/4"	60Nm	25	55	176.3	231.3	182	112
1 1/2"	100Nm	32	63	176.3	239.3	195	125
2"	100Nm	38	74	176.3	250.3	195	149

Valve dimensions [mm], continued (valve body detail)



Valve dimensions [mm], continued (valve body detail)

Full Port	Std. Port	A	B	C	d1	d2	E	F	G	H	K	L	Port	Full Wt [Kg]	Std Wt [Kg]
1/4"	-	37.5	11	130	6	6	62	36	42	9	36	72	11	0.66	0.66
3/8"	1/2"	38.5	11	130	6	6	62	36	42	9	36	72	12	0.66	0.66
1/2"	3/4"	42	11	130	6	6	64	36	42	9	41.5	83	15	0.86	0.66
3/4"	1"	49	14	165	6	7.1	82	42	50	11	49.5	99	20	1.48	0.86
1"	1 1/4"	55	14	165	6	7.1	89	42	50	11	56	112	25	2.22	1.52
1 1/4"	1 1/2"	63	18	205	7.1	9.2	98	50	70	14	62.5	125	32	3.22	2.18
1 1/2"	2"	74	18	205	7.1	9.2	108	50	70	14	74.5	149	38	5.36	3.38
2"	-	93	22	325	9.2	11.4	140	70	102	17	87	174	50	9.7	5.26

Valve dimensions, continued (actuator detail)

Motor 10 - 20 Nm

after detaching the lid - SW9

for mounting screws M6

for mounting screws M5

Standard: cable gland ISO M20 or Multivolt/Control actuator: cable plug acc. to EN 175301-803

Cable gland ISO M20

SW24

Hand lever

Conversion sleeve

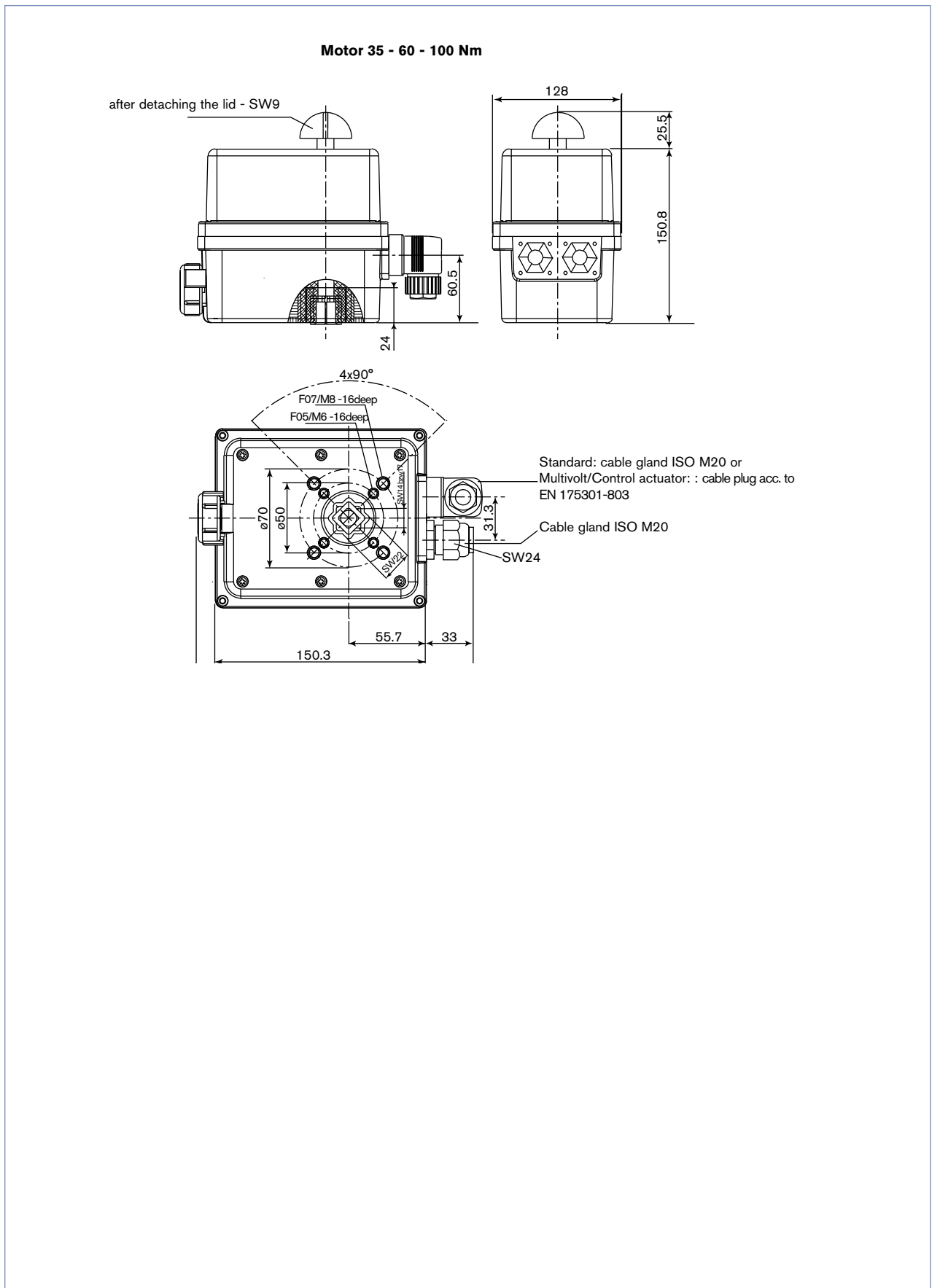
14/9 14/11

Removable flange plate

F03/F05 F04

Flange	Screws
F03	Ø 36 M5
F04	Ø 42 M5
F05	Ø 50 M6

Valve dimensions, continued (actuator detail)

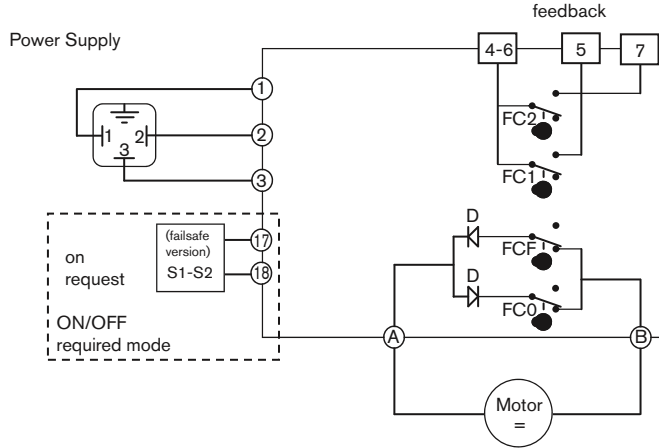
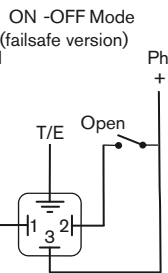
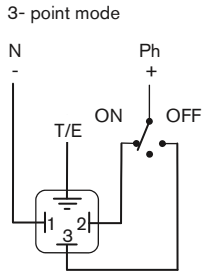


Electrical connection

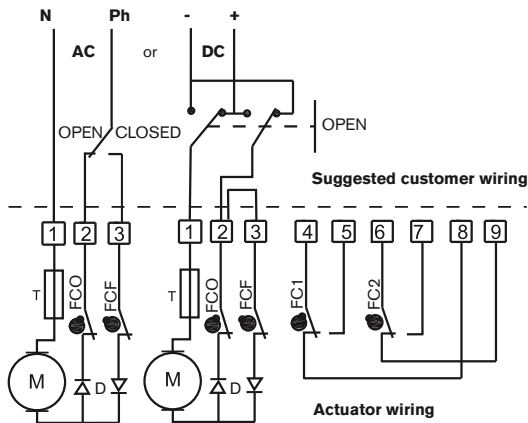
Switch drawings

100-240 V AC/50-60 Hz multi-volt version

Recommended Wiring



24 V AC/DC standard version




Symbol	Description
FCO	Open limit switch
FCF	Close limit switch
FC1	Auxiliary 1 limit switch
FC2	Auxiliary 1 limit switch
M	Motor
T	Thermal fuse


Symbol	Description
D	Diode
C	Capacitor
P	Potentiometer
H	Heating resistor
J7	Heating resistor connection
J8	Potentiometer connector

Ordering chart

3/2-way stainless steel ball valve with on/off Type 3003 actuator & L port configuration

	Valve function	Orifice Diameter [mm]	Port connection Ø	Pressure [bar]	Power supply	Body material	Seal material	ID No. [on/off control]
	3/2 Way L Port	12	1/2"	70 bar	24V DC	SS-316	PTFE	AU33046
		12	1/2"	70 bar	240V AC	SS-316	PTFE	AU33047
		15	3/4"	70 bar	24V DC	SS-316	PTFE	AU33051
		15	3/4"	70 bar	240V AC	SS-316	PTFE	AU33052
		20	1"	70 bar	24V DC	SS-316	PTFE	AU33055
		20	1"	70 bar	240V AC	SS-316	PTFE	AU33057
		25	1 1/4"	70 bar	24V DC	SS-316	PTFE	AU33060
		25	1 1/4"	70 bar	240V AC	SS-316	PTFE	AU33062
		32	1 1/2"	70 bar	24V DC	SS-316	PTFE	AU33065
		32	1 1/2"	70 bar	240V AC	SS-316	PTFE	AU33067
		40	2"	70 bar	240V AC	SS-316	PTFE	AU33070
		40	2"	70 bar	24V DC	SS-316	PTFE	AU33071

3/2-way stainless steel ball valve with on/off Type 3003 actuator & T port configuration

	Valve function	Orifice Diameter [mm]	Port connection Ø	Pressure [bar]	Power supply	Body material	Seal material	ID No. [on/off control]
	3/2 Way T Port	12	1/2"	70 bar	24V DC	SS-316	PTFE	AU33075
		12	1/2"	70 bar	240V AC	SS-316	PTFE	AU33076
		15	3/4"	70 bar	24V DC	SS-316	PTFE	AU33079
		15	3/4"	70 bar	240V AC	SS-316	PTFE	AU33080
		20	1"	70 bar	24V DC	SS-316	PTFE	AU33083
		20	1"	70 bar	240V AC	SS-316	PTFE	AU33085
		25	1 1/4"	70 bar	24V DC	SS-316	PTFE	AU33088
		25	1 1/4"	70 bar	240V AC	SS-316	PTFE	AU33090
		32	1 1/2"	70 bar	24V DC	SS-316	PTFE	AU33093
		32	1 1/2"	70 bar	240V AC	SS-316	PTFE	AU33095
		40	2"	70 bar	240V AC	SS-316	PTFE	AU33098
		40	2"	70 bar	24V DC	SS-316	PTFE	AU33099

 Further versions on request

 Port Connection

 Approvals

 Temperature

Alternative Electric Actuator, Types 3005 & 3004: Heavy Duty & High Torque



Bürkert's Type 3005 electrical actuator is for heavy duty industrial applications where a higher torque rating or a more rugged IP67 housing is required. The Type 3004 delivers the same heavy duty function, with ATEX and IECEx approvals. The Types 3005 and 3004 come in models with torques 25Nm, 45Nm, 75Nm, 100Nm, 150Nm, 300Nm (plus 600Nm & 1,000 Nm on request).

Similarly to the Type 3003 electrical actuators featured in this datasheet, these heavy duty models offer on/off and modulating control functions, prominent visual position indication and manual override standard. Note that models 25Nm – 75Nm have a gear disengage manual override, while larger torque models come with a hand wheel manual override.

Contact Bürkert on 1300 888 868 (Aust) or 0800 BURKERT (NZ) for more information on Type 3005 and 3004 heavy duty electrical actuators for quarter turn valves.