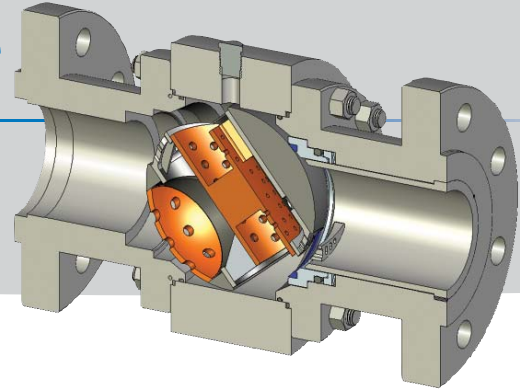


QTCV-T4 Series Quiet Trim Control Valve



Features

- High Pressure Drop (1500 psid)
- High Capacity
- Non-Clogging/Self-Cleaning
- High Turndown (200:1)
- Aggressive Noise Attenuation (25 dBA)
- Wide Range of Configuration
- Metal-to-Metal Configuration
- Superior Control Precision

Description

The Becker QTCV-T4 Quiet Trim Control Valve represents a breakthrough in rotary control valve technology. The QTCV-T4-Ball® extends the capability of the T-Ball range by allowing higher pressure drops and even more effective noise attenuation technology. The T4 is the ideal solution for aggressive natural gas regulation applications where dirt and higher pressure differential demands a more rugged control valve!

Natural Gas Applications

- Gas Storage Withdrawal
- Transmission Custody Transfer
- Power Plants
- Power Generation Fuel Control
- Natural Gas Transmission Interconnect
- City-Gate Regulation
- Natural Gas Production
- Compressor Anti-Surge Control

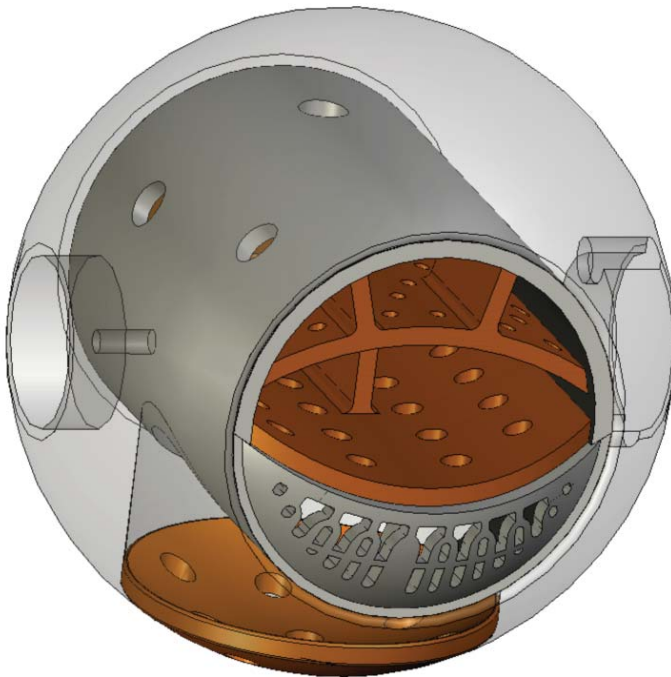


Table 1 - Product Properties

Range of Product	
Size	4.0" (100 mm) to 20" (500 mm)
Pressure Ratings	150-1500 ANSI
End Connections	RFFE (standard), RTJ, Weld End
Certification	Firesafe API 6FA, API 607 4th Ed. NACE MR 0175, PED 97/23/EC (option) ATEX Directive 94/9/EC (option)
Face-Face Dims	ANSI B16.10
Testing	ANSI B16.34
Performance	
Max Control Pressure Drop	1500 psid
Max Noise Attenuation	25 dBA
Turndown	200:1
Min Control Limit	9.0° Open
Max Control Limit	85° Open
Shut Off Rating	Class IV, VI Option
Materials of Construction	
Body	ASTM A350 LF2 CS (standard), 316SS (option), Duplex (option)
Throttling Trim	17-4PH SS (standard), Duplex (option)
Seal Ring Material	ASTM A350-LF2 (Standard), A316 SS, Tungsten Carbide (option)
Seal Seat Material	Nylon (standard), PEEK (option), Metal-Metal TCC (option)
Ball Material	ENP - ASTM A350-LF2 (Standard), 316 SS (option), Tungsten Carbide Overlay (option)
Stem Material	AISI 4140 (standard), 17-4PH SS (option)

Table 2 - QTCV-T4 Flow Coefficients

Valve Size	MIN	QTCV-T4 Valve Position (Degrees Open)										MAX	FULL
		9°	10°	20°	30°	40°	50°	60°	70°	80°	85°		
4 (100)	1.2	1.3	6.7	15	27	45	78	127	184	209	225		
6 (150)	2.6	3.0	15	33	60	102	175	285	414	470	505		
8 (200)	4.5	5.2	26	57	103	175	301	490	711	808	868		
10 (250)	7.2	8.3	42	92	167	284	487	792	1151	1307	1404		
12 (300)	10.4	12	60	132	240	408	701	1141	1658	1882	2022		
16 (400)	18.5	21	107	235	427	726	1246	2029	2947	3345	3594		
20 (500)	28.9	33	167	367	667	1134	1946	3169	4604	5226	5615		
% Full Cv	0.50%	0.60%	3.0%	6.5%	12%	20%	35%	56%	82%	93%	100%		

Notes

1. MIN - Minimum controllable Cv (9° Open Travel) 2. MAX - Maximum controllable Cv (85° Open Travel) 3. FULL - Full Open Cv

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Figure 1 - Flow Profile 6.0 in QTCV-T4 T-Ball®

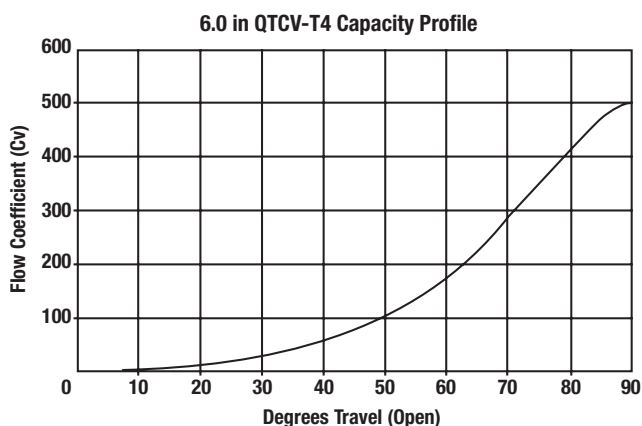
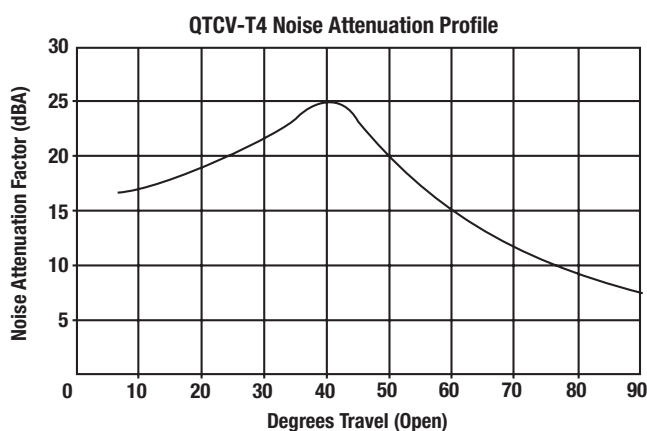


Figure 2 - Noise Profile QTCV-T4 T-Ball®



Note

1. Noise attenuation profile relative to non-attenuating ball type control valve (natural gas application).

