

ECV Valve



Application

Regulatory valve of ECV type has to work with low erosive media only. It is suitable to control given parameter when rather small pressure drops appear. It also meets demands of the time limited work at critical conditions. Continuous heavy cavitation, flashing, or throttled flow call for external protection, such as an orifice or diffuser. ECV valve often is employed as highly precise manual bypass valve.

Description

ECV is straightway valve. Basically, it consists of body with padded seat and a plug with a stem driven through guide bushing. The body is topped by the bonnet and sealed with graphite spiral wound gasket (placed in channel). The single-stage expansion of the medium is controlled by linear shift of the plug. There are two types of plug available: profiled or perforated. The former is advised when media flow goes under the plug.

Technical data

| | | | | |
|------------------------------|--|--------------------------|---------------------------|--------------------------|
| Nominal diameter | DN15÷DN300 | | | |
| Nominal pressure | PN10÷PN400 | | | |
| Connections | bolted flanges; welding ready | | | |
| Flow coefficient Kvs | 0,1÷1300 m ³ /h | | | |
| Body | 1.0460 (P250GH) | 1.5419 (G20Mo5) | 1.4308 (GX5CrNi19-10) | 1.4903 (X10CrMoVNb9-1) |
| | 1.0619 (GP240GH) | 1.7357 (G17CrMo5-5) | 1.4408 (GX5CrNiMo19-11-2) | 1.4901 (X10CrWMoVNb9-2) |
| | 1.5415 (16Mo3) | 1.4541 (X6CrNiTi18-10) | 1.7380 (10CrMo9-10) | 1.7379 (G17CrMo9-10) |
| | 1.7335 (13CrMo4-5) | 1.4404 (X2CrNiMo17-12-2) | 1.7715 (14MoV6-3) | 1.6368 (15NiCuMoNb5-6-4) |
| Plug | 1.4541(X6CrNiTi18-10) | 1.4057(X17CrNi16-2) | 1.4125 (X105CrMo17) | titanium BT-9 |
| Seat | stellite | | | |
| Stem | 1.4057 (X17CrNi16-2) | 1.4923 (X22CrMoV12-2) | | |
| Hardening of the inner parts | stellite; nitriding; hardening | | | |
| Rangeability | 50:1 | | | |
| Leakage class | metal/metal sealing – IV (standard); V (improved); soft sealing (NBR or PTFE) – VI (special) | | | |
| Body's gland | spral, metal+graphite | | | |
| Seal bushing | graphite; PTFE | | | |