

NSP-FEDER-Paket Baureihe "STANDARD"

zum externen Befüllen über Schlauchanschluss, Schlauchleitung, Kontrollarmatur u. Ausgleichsbehälter.

- volle Federkraft bei Hubbeginn
- v. vom Anwender einstellbare Kraft
- gleichbleibende Kraft auf die Lebensdauer bezogen
- gebündelte Kraft auf kleinstem Raum
- robuste Ausführung, lange Standzeiten

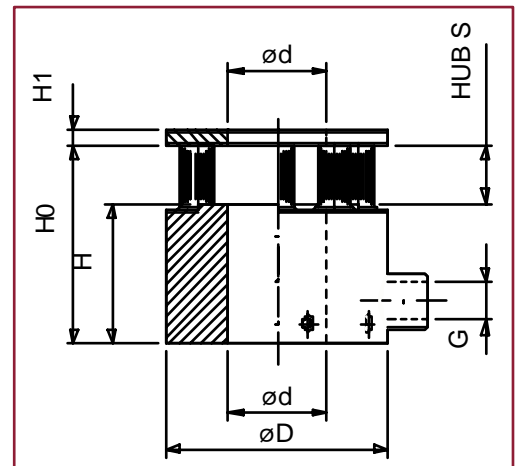
Standard-Lieferumfang ohne Druckscheibe Typ DS
falls erforderlich bei Bestellung angeben.
Nur im eingebauten Zustand mit Gas füllen!

Ausgleichsbehälter auf Anfrage erhältlich!

- (1) max. zul. Betriebsdruck 150 bar!
- (2) andere Gewindeanschlüsse möglich!

Maßänderungen vorbehalten! Weitere Abmessungen auf Anfrage!

[\(Siehe auch Sicherheitshinweise auf Seite 5\)](#)



| D | d | Hub S | H0 | H | H1 | G(2) | F1 (N) 50bar | F2(N) 100bar | F3(N) 150bar (1) | Typ Bestell-Nr. |
|----|----|-------|----|----|-----------------|-------|-----------------|-----------------|------------------------|--------------------|
| 47 | 12 | 10 | 58 | 48 | 4 | G1/8" | 3980 | 7960 | 11940 | S 04701210-6-13 |
| | | 15 | 68 | 53 | S 04701215-6-13 | | | | | |
| | | 20 | 78 | 58 | S 04701220-6-13 | | | | | |
| | | 30 | 98 | 68 | S 04701230-6-13 | | | | | |
| 50 | 15 | 10 | 58 | 48 | 4 | G1/8" | 3980 | 7960 | 11940 | S 05001510-6-13 |
| | | 15 | 68 | 53 | S 05001515-6-13 | | | | | |
| | | 20 | 78 | 58 | S 05001520-6-13 | | | | | |
| | | 30 | 98 | 68 | S 05001530-6-13 | | | | | |
| 52 | 17 | 10 | 58 | 48 | 4 | G1/8" | 3980 | 7960 | 11940 | S 05201710-6-13 |
| | | 15 | 68 | 53 | S 05201715-6-13 | | | | | |
| | | 20 | 78 | 58 | S 05201720-6-13 | | | | | |
| | | 30 | 98 | 68 | S 05201730-6-13 | | | | | |
| 55 | 20 | 10 | 58 | 48 | 4 | G1/8" | 3980 | 7960 | 11940 | S 05502010-6-13 |
| | | 15 | 68 | 53 | S 05502015-6-13 | | | | | |
| | | 20 | 78 | 58 | S 05502020-6-13 | | | | | |
| | | 30 | 98 | 68 | S 05502030-6-13 | | | | | |
| 60 | 20 | 10 | 58 | 48 | 4 | G1/8" | 4952 | 9904 | 14856 | S 06002010-6-14 |
| | | 15 | 68 | 53 | S 06002015-6-14 | | | | | |
| | | 20 | 78 | 58 | S 06002020-6-14 | | | | | |
| | | 30 | 98 | 68 | S 06002030-6-14 | | | | | |
| 60 | 25 | 10 | 58 | 48 | 4 | G1/8" | 5064 | 10128 | 15920 | S 06002510-8-13 |
| | | 15 | 68 | 53 | S 06002515-8-13 | | | | | |
| | | 20 | 78 | 58 | S 06002520-8-13 | | | | | |
| | | 30 | 98 | 68 | S 06002530-8-13 | | | | | |
| 65 | 30 | 10 | 58 | 48 | 4 | G1/8" | 5064 | 10128 | 15192 | S 06503010-8-13 |
| | | 15 | 68 | 53 | S 06503015-8-13 | | | | | |
| | | 20 | 78 | 58 | S 06503020-8-13 | | | | | |
| | | 30 | 98 | 68 | S 06503030-8-13 | | | | | |

NSP-FEDER-Paket Baureihe "STANDARD"

| D | d | Hub S | H0 | H | H1 | G(2) | F1 (N) 50bar | F2(N) 100bar | F3(N) 150bar (1) | Typ Bestell-Nr. |
|----|----|----------|-----|-----|----|------------|-----------------|-----------------|------------------------|--------------------|
| 70 | 25 | 10 | 58 | 48 | 5 | G1/8" | 6092 | 12058 | 18086 | S 07002510-6-13 |
| | | 20 | 78 | 58 | | | | | | S 07002515-6-13 |
| | | 30 | 98 | 68 | | | | | | S 07002520-8-13 |
| | | 40 | 118 | 78 | | | | | | S 07002530-8-13 |
| | | 50 | 138 | 88 | | | | | | S 07002530-8-13 |
| 70 | 30 | 10 | 58 | 48 | 4 | G1/8" | 6602 | 13204 | 19806 | S 07003010-8-14 |
| | | 15 | 68 | 53 | | | | | | S 07003015-8-14 |
| | | 20 | 78 | 58 | | | | | | S 07003020-8-14 |
| | | 30 | 98 | 68 | | | | | | S 07003030-8-14 |
| 70 | 35 | 10 | 58 | 48 | 4 | G1/8" | 6633 | 13266 | 19899 | S 07003510-10-13 |
| | | 15 | 68 | 53 | | | | | | S 07003515-10-13 |
| | | 20 | 78 | 58 | | | | | | S 07003520-10-13 |
| | | 30 | 98 | 68 | | | | | | S 07003530-10-13 |
| 75 | 40 | 10 | 58 | 48 | 4 | G1/8" | 6633 | 13266 | 19899 | S 07504010-10-13 |
| | | 15 | 68 | 53 | | | | | | S 07504015-10-13 |
| | | 20 | 78 | 58 | | | | | | S 07504020-10-13 |
| | | 30 | 98 | 68 | | | | | | S 07504030-10-13 |
| 80 | 30 | 10 | 63 | 53 | 5 | G1/4" | 7630 | 15260 | 22890 | S 08003010-6-18 |
| | | 20 | 83 | 63 | | | | | | S 08003020-6-18 |
| | | 30 | 103 | 73 | | | | | | S 08003030-6-18 |
| | | 40 | 123 | 83 | | | | | | S 08003040-6-18 |
| | | 50 | 143 | 93 | | | | | | S 08003050-6-18 |
| | | 60 | 163 | 103 | | | | | | S 08003060-6-18 |
| | | 70 | 183 | 113 | | | | | | S 08003070-6-18 |
| 80 | 35 | 15 | 68 | 53 | 5 | JNF1/2"-2l | 8038 | 16077 | 24115 | S 08003515-8-16 |
| | | 20 | 78 | 58 | | | | | | S 08003520-8-16 |
| | | 30 | 98 | 68 | | | | | | S 08003530-8-16 |
| | | 40 | 118 | 78 | | | | | | S 08003540-8-16 |
| | | 50 | 138 | 88 | | | | | | S 08003550-8-16 |
| 80 | 40 | 10 | 58 | 48 | 4 | G1/4" | 8252 | 16504 | 24756 | S 08004010-10-14 |
| | | 15 | 68 | 53 | | | | | | S 08004015-10-14 |
| | | 20 | 78 | 58 | | | | | | S 08004020-10-14 |
| | | 30 | 98 | 68 | | | | | | S 08004030-10-14 |
| 80 | 45 | 10 | 58 | 48 | 4 | G1/4" | 7960 | 15920 | 23880 | S 08004510-12-13 |
| | | 15 | 68 | 53 | | | | | | S 08004515-12-13 |
| | | 20 | 78 | 58 | | | | | | S 08004520-12-13 |
| | | 30 | 98 | 68 | | | | | | S 08004530-12-13 |
| 90 | 40 | 10 | 63 | 53 | 5 | G1/4" | 10174 | 20347 | 30521 | S 09004010-8-18 |
| | | 20 | 83 | 63 | | | | | | S 09004020-8-18 |
| | | 30 | 103 | 73 | | | | | | S 09004030-8-18 |
| | | 40 | 123 | 83 | | | | | | S 09004040-8-18 |
| | | 50 | 143 | 93 | | | | | | S 09004050-8-18 |
| | | 60 | 163 | 103 | | | | | | S 09004060-8-18 |
| | | 70 | 183 | 113 | | | | | | S 09004070-8-18 |

NSP-FEDER-Paket Baureihe "STANDARD"

| D | d | Hub S | H0 | H | H1 | G(2) | F1 (N) 50bar | F2(N) 100bar | F3(N) 150bar (1) | Typ Bestell-Nr. |
|-----|----|----------|-----|-----|----|------------|-----------------|-----------------|------------------------|--------------------|
| 90 | 45 | 10 | 58 | 48 | 5 | G1/4" | 100487 | 20096 | 30144 | S 09004510-10-16 |
| | | 20 | 78 | 58 | | | | | | S 09004520-10-16 |
| | | 30 | 98 | 68 | | | | | | S 09004530-10-16 |
| | | 40 | 118 | 78 | | | | | | S 09004540-10-16 |
| | | 50 | 138 | 88 | | | | | | S 09004550-10-16 |
| 100 | 40 | 10 | 68 | 58 | 5 | G1/4" | 11398 | 22796 | 34195 | S 10004010-6-22 |
| | | 20 | 88 | 68 | | | | | | S 10004020-6-22 |
| | | 30 | 108 | 78 | | | | | | S 10004030-6-22 |
| | | 40 | 128 | 88 | | | | | | S 10004040-6-22 |
| | | 50 | 148 | 98 | | | | | | S 10004050-6-22 |
| | | 60 | 168 | 108 | | | | | | S 10004060-6-22 |
| | | 70 | 188 | 118 | | | | | | S 10004070-6-22 |
| 100 | 45 | 10 | 63 | 53 | 5 | JNF1/2"-2(| 15260 | 25120 | 37680 | S 10004510-8-20 |
| | | 20 | 83 | 63 | | | | | | S 10004520-8-20 |
| | | 30 | 103 | 73 | | | | | | S 10004530-8-20 |
| | | 40 | 123 | 83 | | | | | | S 10004540-8-20 |
| | | 50 | 143 | 93 | | | | | | S 10004550-8-20 |
| | | 60 | 163 | 103 | | | | | | S 10004560-8-20 |
| | | 70 | 183 | 113 | | | | | | S 10004570-8-20 |
| 100 | 50 | 10 | 63 | 53 | 5 | G1/4" | 10174 | 25434 | 38151 | S 10005010-10-18 |
| | | 20 | 83 | 63 | | | | | | S 10005020-10-18 |
| | | 30 | 103 | 73 | | | | | | S 10005030-10-18 |
| | | 40 | 123 | 83 | | | | | | S 10005040-10-18 |
| | | 50 | 143 | 93 | | | | | | S 10005050-10-18 |
| | | 60 | 163 | 103 | | | | | | S 10005060-10-18 |
| | | 70 | 183 | 113 | | | | | | S 10005070-10-18 |
| 105 | 65 | 10 | 58 | 48 | 4 | G1/4" | 9903 | 19806 | 29709 | S 10506510-12-14 |
| | | 15 | 68 | 53 | | | | | | S 10506515-12-14 |
| | | 20 | 78 | 58 | | | | | | S 10506520-12-14 |
| | | 30 | 98 | 68 | | | | | | S 10506530-12-14 |
| | | 40 | 118 | 78 | | | | | | S 10506540-12-14 |
| 112 | 57 | 10 | 63 | 53 | 5 | G1/4" | 15700 | 31400 | 47100 | S 11205710-10-20 |
| | | 20 | 83 | 63 | | | | | | S 11205720-10-20 |
| | | 30 | 103 | 73 | | | | | | S 11205730-10-20 |
| | | 40 | 123 | 83 | | | | | | S 11205740-10-20 |
| | | 50 | 143 | 93 | | | | | | S 11205750-10-20 |
| | | 60 | 163 | 103 | | | | | | S 11205760-10-20 |
| | | 70 | 183 | 113 | | | | | | S 11205770-10-20 |
| 120 | 65 | 10 | 63 | 53 | 5 | G1/4" | 15700 | 31400 | 47100 | S 12006510-10-20 |
| | | 20 | 83 | 63 | | | | | | S 12006520-10-20 |
| | | 30 | 103 | 73 | | | | | | S 12006530-10-20 |
| | | 40 | 123 | 83 | | | | | | S 12006540-10-20 |
| | | 50 | 143 | 93 | | | | | | S 12006550-10-20 |
| | | 60 | 163 | 103 | | | | | | S 12006560-10-20 |
| | | 70 | 183 | 113 | | | | | | S 12006570-10-20 |

NSP-FEDER-Paket Baureihe "STANDARD"

| D | d | Hub S | H0 | H | H1 | G(2) | F1 (N) 50bar | F2(N) 100bar | F3(N) 150bar (1) | Typ Bestell-Nr. |
|-----|----|----------|-----|-----|----|------------|-----------------|-----------------|------------------------|--------------------|
| 125 | 60 | 10 | 73 | 63 | 6 | JNF1/2"-2l | 19625 | 39250 | 58875 | S 12506010-8-25 |
| | | 20 | 93 | 73 | | | | | | S 12506020-8-25 |
| | | 30 | 113 | 83 | | | | | | S 12506030-8-25 |
| | | 40 | 133 | 93 | | | | | | S 12506040-8-25 |
| | | 50 | 153 | 103 | | | | | | S 12506050-8-25 |
| | | 60 | 173 | 113 | | | | | | S 12506060-8-25 |
| | | 70 | 193 | 123 | | | | | | S 12506070-8-25 |
| 125 | 65 | 10 | 68 | 58 | 5 | G1/4" | 15198 | 30395 | 45593 | S 12506510-8-22 |
| | | 20 | 88 | 68 | | | | | | S 12506520-8-22 |
| | | 30 | 108 | 78 | | | | | | S 12506530-8-22 |
| | | 40 | 128 | 88 | | | | | | S 12506540-8-22 |
| | | 50 | 148 | 98 | | | | | | S 12506550-8-22 |
| | | 60 | 168 | 108 | | | | | | S 12506560-8-22 |
| | | 70 | 188 | 118 | | | | | | S 12506570-8-22 |
| 125 | 70 | 10 | 63 | 53 | 5 | G1/4" | 15700 | 37680 | 56520 | S 12507010-12-20 |
| | | 20 | 83 | 63 | | | | | | S 12507020-12-20 |
| | | 30 | 103 | 73 | | | | | | S 12507030-12-20 |
| | | 40 | 123 | 83 | | | | | | S 12507040-12-20 |
| | | 50 | 143 | 93 | | | | | | S 12507050-12-20 |
| | | 60 | 163 | 103 | | | | | | S 12507060-12-20 |
| | | 70 | 183 | 113 | | | | | | S 12507070-12-20 |
| 140 | 70 | 10 | 73 | 63 | 6 | G3/8" | 24531 | 49062 | 73593 | S 14007010-10-25 |
| | | 20 | 93 | 73 | | | | | | S 14007020-10-25 |
| | | 30 | 113 | 83 | | | | | | S 14007030-10-25 |
| | | 40 | 133 | 93 | | | | | | S 14007040-10-25 |
| | | 50 | 153 | 103 | | | | | | S 14007050-10-25 |
| | | 60 | 173 | 113 | | | | | | S 14007060-10-25 |
| | | 70 | 193 | 123 | | | | | | S 14007070-10-25 |
| 140 | 80 | 10 | 68 | 58 | 5 | G3/8" | 18997 | 37994 | 56991 | S 14008010-10-22 |
| | | 20 | 88 | 68 | | | | | | S 14008020-10-22 |
| | | 30 | 108 | 78 | | | | | | S 14008030-10-22 |
| | | 40 | 128 | 88 | | | | | | S 14008040-10-22 |
| | | 50 | 148 | 98 | | | | | | S 14008050-10-22 |
| | | 60 | 168 | 108 | | | | | | S 14008060-10-22 |
| | | 70 | 188 | 118 | | | | | | S 14008070-10-22 |
| 150 | 80 | 10 | 73 | 63 | 6 | G3/8" | 29437 | 58874 | 88312 | S 15008010-12-25 |
| | | 20 | 93 | 73 | | | | | | S 15008020-12-25 |
| | | 30 | 113 | 83 | | | | | | S 15008030-12-25 |
| | | 40 | 133 | 93 | | | | | | S 15008040-12-25 |
| | | 50 | 153 | 103 | | | | | | S 15008050-12-25 |
| | | 60 | 173 | 113 | | | | | | S 15008060-12-25 |
| | | 70 | 193 | 123 | | | | | | S 15008070-12-25 |

NSP-FEDER-Paket Baureihe "STANDARD"

| D | d | Hub S | H0 | H | H1 | G(2) | F1 (N) 50bar | F2(N) 100bar | F3(N) 150bar (1) | Typ Bestell-Nr. |
|-----|-----|----------|-----|-----|----|-------|-----------------|-----------------|------------------------|--------------------|
| 160 | 90 | 10 | 73 | 63 | 6 | G3/8" | 29437 | 58874 | 88312 | S 16009010-12-25 |
| | | 20 | 93 | 73 | | | | | | S 16009020-12-25 |
| | | 30 | 113 | 83 | | | | | | S 16009030-12-25 |
| | | 40 | 133 | 93 | | | | | | S 16009040-12-25 |
| | | 50 | 153 | 103 | | | | | | S 16009050-12-25 |
| | | 60 | 173 | 113 | | | | | | S 16009060-12-25 |
| | | 70 | 193 | 123 | | | | | | S 16009070-12-25 |
| 180 | 110 | 10 | 73 | 63 | 5 | G3/8" | 34343 | 68686 | 103030 | S 18011010-14-25 |
| | | 20 | 93 | 73 | | | | | | S 18011020-14-25 |
| | | 30 | 113 | 83 | | | | | | S 18011030-14-25 |
| | | 40 | 133 | 93 | | | | | | S 18011040-14-25 |
| | | 50 | 153 | 103 | | | | | | S 18011050-14-25 |
| | | 60 | 173 | 113 | | | | | | S 18011060-14-25 |
| | | 70 | 193 | 123 | | | | | | S 18011070-14-25 |

Einbau

Werden die NSP-FEDER-PAKETE in einer Werkzeugpalette versenkt eingebaut, so muss unbedingt eine Drainagebohrung zum Abfluss von Schmier- und Kühlmittel, je nach anfallendem Medium reichlich dimensioniert, vorgesehen werden.

Bei Hublängen über 20 mm und Verfahrensgeschwindigkeiten über 0.2m/sec, sind die NSP-FEDER-PAKETE unter Vorspannung einzubauen. Die Vorspannung sollte mindestens 1 mm betragen. Federn mit einem Fülldruck von 150 bar und darüber müssen immer mit Vorspannung eingebaut werden! NSP-FEDER-PAKETE nicht auf Block fahren! Auch hier muss eine Hubreserve von mindestens 1 mm vorgesehen werden. Feder niemals über den im Katalog angegebenen Fülldruck hinaus befüllen. Zum Befüllen nur Original OEST-Fülladapter verwenden

Wartung und Reinigung

Zur Reinigung die Gasfedern nur mit einem sauberen Putztuch abwischen! Gegebenenfalls das Putztuch mit Reinigungsmittel befeuchten. Niemals die Gasfeder mit Reinigungs- oder Lösungsmittel besprühen oder in dieses eintauchen.

Sicherer Umgang

Bei Gasfedern handelt es sich um Bauteile, welche mit Druck beaufschlagt sind (AUTONOM) oder nach Installation und Einbau mit Druck beaufschlagt werden (STANDARD). Bei Arbeiten am System oder an der Feder selbst zu allererst den Druck ablassen! Eine Demontage und Reparatur nur von eigens hierfür durch den Hersteller geschultem Fachpersonal oder durch den Hersteller selbst durchführen lassen! Vor Inbetriebnahme unbedingt die Sicherheitshinweise durchlesen und das Bedienungspersonal mit dem sicheren Umgang vertraut machen.

NSP-FEDER-Paket Baureihe "AUTONOM"

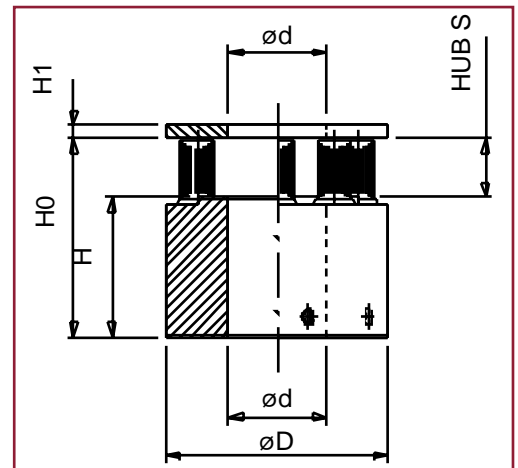
als vorgespannte, geschlossene Einheit,
mit Füllventil, ohne Schlauchanschluss.

- hohe Federkraft bei Hubbeginn
- gleichbleibende Kraft auf die Lebensdauer bezogen
- gebündelte Kraft auf kleinstem Raum
- robuste Ausführung, lange Standzeiten
- voll kompatibel zu herkömmlichen Tellerfedernpaketen

Standard-Lieferumfang ohne Druckscheibe Typ DS
falls erforderlich bei Bestellung angeben.

- (1) max. zul. Fülldruck!
- (2) Kraft bei max. zul. Betriebsdruck 150 bar!
- (3) Verhältnis Anfangskraft zu Endkraft!

Maßänderungen vorbehalten! Weitere Abmessungen auf Anfrage!



| D | d | Hub S | H0 | H | H1 | F1 (N) | P1 (bar) (1) | F max (N) (2) | Feder-rate N/mm | I F1/Fmax (3) | Typ Bestell-Nr. |
|----|----|-------|-----|----|----|--------|--------------|---------------|-----------------|---------------|-------------------|
| 50 | 15 | 10 | 68 | 58 | 4 | 5845 | 110 | 7960 | 212 | 1,36 | A 05001510-4/2-13 |
| | | 15 | 78 | 63 | | 5342 | 101 | | 175 | 1,49 | A 05001515-4/2-13 |
| | | 20 | 88 | 68 | | 4989 | 94 | | 149 | 1,60 | A 05001520-4/2-13 |
| | | 25 | 98 | 73 | | 4727 | 89 | | 129 | 1,68 | A 05001525-4/2-13 |
| | | 30 | 108 | 78 | | 4525 | 85 | | 114 | 1,76 | A 05001530-4/2-13 |
| 52 | 17 | 10 | 68 | 58 | 4 | 5845 | 110 | 7960 | 212 | 1,36 | A 05201710-4/2-13 |
| | | 15 | 78 | 63 | | 5342 | 101 | | 175 | 1,49 | A 05201715-4/2-13 |
| | | 20 | 88 | 68 | | 4989 | 94 | | 149 | 1,60 | A 05201720-4/2-13 |
| | | 25 | 98 | 73 | | 4727 | 89 | | 129 | 1,68 | A 05201725-4/2-13 |
| | | 30 | 108 | 78 | | 4525 | 85 | | 114 | 1,76 | A 05201730-4/2-13 |
| 55 | 20 | 10 | 68 | 58 | 4 | 5845 | 110 | 7960 | 212 | 1,36 | A 05502010-4/2-13 |
| | | 15 | 78 | 63 | | 5342 | 101 | | 175 | 1,49 | A 05502015-4/2-13 |
| | | 20 | 88 | 68 | | 4989 | 94 | | 149 | 1,60 | A 05502020-4/2-13 |
| | | 25 | 98 | 73 | | 4727 | 89 | | 129 | 1,68 | A 05502025-4/2-13 |
| | | 30 | 108 | 78 | | 4525 | 85 | | 114 | 1,76 | A 05502030-4/2-13 |
| 60 | 20 | 10 | 68 | 58 | 4 | 7387 | 112 | 9903 | 252 | 1,34 | A 06002010-4/2-14 |
| | | 15 | 78 | 63 | | 6781 | 103 | | 208 | 1,46 | A 06002015-4/2-14 |
| | | 20 | 88 | 68 | | 6354 | 96 | | 177 | 1,56 | A 06002020-4/2-14 |
| | | 25 | 98 | 73 | | 6036 | 91 | | 155 | 1,64 | A 06002025-4/2-14 |
| | | 30 | 108 | 78 | | 5791 | 88 | | 137 | 1,71 | A 06002030-4/2-14 |
| 60 | 25 | 10 | 68 | 58 | 4 | 8281 | 104 | 11940 | 366 | 1,44 | A 06002510-6/2-13 |
| | | 15 | 78 | 63 | | 7437 | 93 | | 300 | 1,61 | A 06002515-6/2-13 |
| | | 20 | 88 | 68 | | 6850 | 86 | | 255 | 1,74 | A 06002520-6/2-13 |
| | | 25 | 98 | 73 | | 6418 | 81 | | 221 | 1,86 | A 06002525-6/2-13 |
| | | 30 | 108 | 78 | | 6087 | 77 | | 195 | 1,96 | A 06002530-6/2-13 |
| 65 | 25 | 10 | 68 | 58 | 4 | 10500 | 106 | 14854 | 435 | 1,42 | A 06502510-4/2-14 |
| | | 15 | 78 | 63 | | 9486 | 96 | | 358 | 1,57 | A 06502515-4/2-14 |
| | | 20 | 88 | 68 | | 8777 | 89 | | 304 | 1,69 | A 06502520-4/2-14 |
| | | 25 | 98 | 73 | | 8255 | 83 | | 264 | 1,80 | A 06502525-4/2-14 |
| | | 30 | 108 | 78 | | 7854 | 79 | | 233 | 1,89 | A 06502530-4/2-14 |
| 70 | 25 | 10 | 68 | 58 | 4 | 9095 | 113 | 12058 | 296 | 1,33 | A 07002510-4/2-16 |
| | | 15 | 78 | 63 | | 8379 | 104 | | 245 | 1,44 | A 07002515-4/2-16 |
| | | 20 | 88 | 68 | | 7872 | 98 | | 209 | 1,53 | A 07002520-4/2-16 |
| | | 25 | 98 | 73 | | 7496 | 93 | | 182 | 1,61 | A 07002525-4/2-16 |
| | | 30 | 108 | 78 | | 7204 | 90 | | 162 | 1,67 | A 07002530-4/2-16 |
| | | 40 | 128 | 88 | | 6783 | 84 | | 132 | 1,78 | A 07002540-4/2-16 |

NSP-FEDER-Paket Baureihe "AUTONOM"

| D | d | Hub S | H0 | H | H1 | F1 (N) | P1 (bar) (1) | F max (N) (2) | Feder- rate N/mm | l F1/Fmax (3) | Typ Bestell-Nr. |
|----|----|----------|-----|-----|----|--------|--------------------|---------------------|------------------------|---------------------|--------------------|
| 70 | 30 | 10 | 68 | 58 | 4 | 10500 | 106 | 14854 | 435 | 1,42 | A 07003010-6/2-14 |
| | | 15 | 78 | 63 | | 9486 | 196 | | 358 | 1,57 | A 07003015-6/2-14 |
| | | 20 | 88 | 68 | | 8777 | 89 | | 304 | 1,69 | A 07003020-6/2-14 |
| | | 25 | 98 | 73 | | 8255 | 83 | | 264 | 1,80 | A 07003025-6/2-14 |
| | | 30 | 108 | 78 | | 7854 | 79 | | 233 | 1,89 | A 07003030-6/2-14 |
| 70 | 35 | 10 | 68 | 58 | 4 | 10595 | 113 | 15920 | 532 | 1,50 | A 07003510-8/2-13 |
| | | 15 | 78 | 63 | | 9399 | 104 | | 435 | 1,69 | A 07003515-8/2-13 |
| | | 20 | 88 | 68 | | 8574 | 98 | | 367 | 1,86 | A 07003520-8/2-13 |
| | | 25 | 98 | 73 | | 7971 | 93 | | 318 | 2,00 | A 07003525-8/2-13 |
| | | 30 | 108 | 78 | | 7510 | 90 | | 280 | 2,12 | A 07003530-8/2-13 |
| 80 | 30 | 10 | 73 | 63 | 5 | 11673 | 115 | 15260 | 359 | 1,31 | A 08003010-4/6-18 |
| | | 15 | 83 | 68 | | 10774 | 106 | | 299 | 1,42 | A 08003015-4/6-18 |
| | | 20 | 93 | 73 | | 10132 | 100 | | 256 | 1,51 | A 08003020-4/6-18 |
| | | 25 | 103 | 78 | | 9650 | 95 | | 224 | 1,58 | A 08003025-4/6-18 |
| | | 30 | 113 | 83 | | 9275 | 91 | | 200 | 1,65 | A 08003030-4/6-18 |
| | | 40 | 133 | 93 | | 8729 | 86 | | 163 | 1,75 | A 08003040-4/6-18 |
| | | 50 | 153 | 103 | | 8351 | 82 | | 138 | 1,83 | A 08003050-4/6-18 |
| 80 | 35 | 10 | 68 | 58 | 5 | 13021 | 108 | 18086 | 507 | 1,39 | A 08003510-6/2-16 |
| | | 15 | 78 | 63 | | 11825 | 98 | | 417 | 1,53 | A 08003515-6/2-16 |
| | | 20 | 88 | 68 | | 10987 | 91 | | 355 | 1,65 | A 08003520-6/2-16 |
| | | 25 | 98 | 73 | | 10367 | 86 | | 309 | 1,75 | A 08003525-6/2-16 |
| | | 30 | 108 | 78 | | 9890 | 82 | | 273 | 1,83 | A 08003530-6/2-16 |
| | | 50 | 138 | 98 | | 9204 | 76 | | 222 | 2,07 | A 08003550-6/2-16 |
| 80 | 40 | 10 | 68 | 58 | 4 | 13554 | 103 | 19806 | 625 | 1,46 | A 08004010-8/2-14 |
| | | 15 | 78 | 63 | | 12119 | 92 | | 512 | 1,63 | A 08004015-8/2-14 |
| | | 20 | 88 | 68 | | 11122 | 84 | | 434 | 1,78 | A 08004020-8/2-14 |
| | | 25 | 98 | 73 | | 10390 | 79 | | 377 | 1,91 | A 08004025-8/2-14 |
| | | 30 | 108 | 78 | | 9829 | 74 | | 333 | 2,02 | A 08004030-8/2-14 |
| 80 | 45 | 10 | 68 | 58 | 4 | 11690 | 110 | 15920 | 423 | 1,46 | A 08004510-8/4-13 |
| | | 15 | 78 | 63 | | 10684 | 101 | | 349 | 1,63 | A 08004515-8/4-13 |
| | | 20 | 88 | 68 | | 9978 | 94 | | 297 | 1,78 | A 08004520-8/4-13 |
| | | 25 | 98 | 73 | | 9454 | 89 | | 259 | 1,91 | A 08004525-8/4-13 |
| | | 30 | 108 | 78 | | 9051 | 85 | | 229 | 2,02 | A 08004530-8/4-13 |
| 90 | 40 | 10 | 73 | 63 | 5 | 16724 | 110 | 22891 | 617 | 1,37 | A 09004010-6/2-18 |
| | | 15 | 83 | 68 | | 15222 | 100 | | 511 | 1,50 | A 09004015-6/2-18 |
| | | 20 | 93 | 73 | | 14159 | 93 | | 437 | 1,62 | A 09004020-6/2-18 |
| | | 25 | 103 | 78 | | 13366 | 88 | | 381 | 1,71 | A 09004025-6/2-18 |
| | | 30 | 113 | 83 | | 12753 | 84 | | 338 | 1,80 | A 09004030-6/2-18 |
| | | 40 | 133 | 93 | | 11865 | 78 | | 276 | 1,93 | A 09004040-6/2-18 |
| | | 50 | 153 | 103 | | 11254 | 74 | | 233 | 2,03 | A 09004050-6/2-18 |

NSP-FEDER-Paket Baureihe "AUTONOM"

| D | d | Hub S | H0 | H | H1 | F1 (N) | P1 (bar) (1) | F max (N) (2) | Feder- rate N/mm | l F1/Fmax (3) | Typ Bestell-Nr. |
|-----|----|----------|-----|-----|----|--------|--------------------|---------------------|------------------------|---------------------|--------------------|
| 90 | 45 | 10 | 68 | 58 | 4 | 16935 | 105 | 24115 | 718 | 1,42 | A 09004510-8/2-16 |
| | | 15 | 78 | 63 | | 15248 | 95 | | 4591 | 1,58 | A 09004515-8/2-16 |
| | | 20 | 88 | 68 | | 14067 | 88 | | 502 | 1,71 | A 09004520-8/2-16 |
| | | 25 | 98 | 73 | | 13195 | 82 | | 437 | 1,83 | A 09004525-8/2-16 |
| | | 30 | 108 | 78 | | 12524 | 78 | | 386 | 1,93 | A 09004530-8/2-16 |
| | | 40 | 128 | 88 | | 11560 | 72 | | 314 | 2,09 | A 09004540-8/2-16 |
| 100 | 40 | 10 | 78 | 68 | 5 | 17687 | 116 | 22796 | 511 | 1,29 | A 10004010-4/2-22 |
| | | 20 | 98 | 78 | | 15405 | 101 | | 370 | 1,48 | A 10004020-4/2-22 |
| | | 30 | 118 | 88 | | 14112 | 93 | | 289 | 1,62 | A 10004030-4/2-22 |
| | | 40 | 138 | 98 | | 13279 | 87 | | 238 | 1,72 | A 10004040-4/2-22 |
| | | 50 | 158 | 108 | | 12699 | 84 | | 202 | 1,80 | A 10004050-4/2-22 |
| 100 | 45 | 10 | 73 | 63 | 5 | 20671 | 110 | 28260 | 759 | 1,37 | A 10004510-6/2-20 |
| | | 20 | 93 | 73 | | 17514 | 93 | | 537 | 1,61 | A 10004520-6/2-20 |
| | | 30 | 113 | 83 | | 15784 | 84 | | 416 | 1,79 | A 10004530-6/2-20 |
| | | 40 | 133 | 93 | | 14692 | 78 | | 339 | 1,92 | A 10004540-6/2-20 |
| | | 50 | 153 | 103 | | 13940 | 74 | | 286 | 2,03 | A 10004550-6/2-20 |
| 100 | 50 | 10 | 73 | 63 | 5 | 21684 | 107 | 30521 | 884 | 1,29 | A 10005010-8/2-18 |
| | | 20 | 93 | 73 | | 18067 | 89 | | 623 | 1,48 | A 10005020-8/2-18 |
| | | 30 | 113 | 83 | | 16099 | 79 | | 481 | 1,62 | A 10005030-8/2-18 |
| | | 40 | 133 | 93 | | 14862 | 73 | | 391 | 1,72 | A 10005040-8/2-18 |
| | | 60 | 173 | 113 | | 14012 | 69 | | 330 | 1,80 | A 10005060-8/2-18 |
| 112 | 57 | 10 | 73 | 63 | 5 | 26807 | 107 | 37680 | 1087 | 1,41 | A 11205710-8/2-20 |
| | | 20 | 93 | 73 | | 22356 | 89 | | 766 | 1,69 | A 11205720-8/2-20 |
| | | 30 | 113 | 83 | | 19935 | 79 | | 591 | 1,89 | A 11205730-8/2-20 |
| | | 40 | 133 | 93 | | 18413 | 73 | | 482 | 2,05 | A 11205740-8/2-20 |
| | | 50 | 153 | 103 | | 17368 | 69 | | 406 | 2,17 | A 11205750-8/2-20 |
| 120 | 65 | 10 | 73 | 63 | 5 | 26807 | 107 | 37680 | 1087 | 1,41 | A 12006510-8/2-20 |
| | | 20 | 93 | 73 | | 22356 | 89 | | 766 | 1,69 | A 12006520-8/2-20 |
| | | 30 | 113 | 83 | | 19935 | 79 | | 591 | 1,89 | A 12006530-8/2-20 |
| | | 40 | 133 | 93 | | 18413 | 73 | | 482 | 2,05 | A 12006540-8/2-20 |
| | | 50 | 153 | 103 | | 17368 | 69 | | 406 | 2,17 | A 12006550-8/2-20 |
| 125 | 60 | 10 | 83 | 73 | 6 | 33525 | 114 | 44156 | 1063 | 1,32 | A 12506010-6/2-25 |
| | | 20 | 103 | 83 | | 28709 | 98 | | 772 | 1,54 | A 12506020-6/2-25 |
| | | 30 | 123 | 93 | | 25962 | 88 | | 606 | 1,70 | A 12506030-6/2-25 |
| | | 50 | 163 | 113 | | 22944 | 78 | | 424 | 1,93 | A 12506050-6/2-25 |
| | | 70 | 203 | 133 | | 24186 | 82 | | 499 | 1,83 | A 12506070-6/2-25 |
| 125 | 65 | 10 | 78 | 68 | 5 | 25391 | 111 | 34195 | 880 | 1,35 | A 12506510-6/2-22 |
| | | 20 | 98 | 78 | | 21586 | 95 | | 630 | 1,58 | A 12506520-6/2-22 |
| | | 30 | 118 | 88 | | 19464 | 85 | | 491 | 1,76 | A 12506530-6/2-22 |
| | | 40 | 138 | 98 | | 18111 | 79 | | 402 | 1,89 | A 12506540-6/2-22 |
| | | 50 | 158 | 108 | | 17172 | 75 | | 340 | 1,99 | A 12506550-6/2-22 |

NSP-FEDER-Paket Baureihe "AUTONOM"

| D | d | Hub S | H0 | H | H1 | F1 (N) | P1 (bar) (1) | F max (N) (2) | Feder- rate N/mm | l F1/Fmax (3) | Typ Bestell-Nr. |
|-----|----|----------|-----|-----|----|--------|--------------------|---------------------|------------------------|---------------------|--------------------|
| 125 | 70 | 10 | 73 | 63 | 5 | 32872 | 105 | 47100 | 1423 | 1,43 | A 12507010-10/2-20 |
| | | 20 | 93 | 73 | | 27112 | 86 | | 999 | 1,74 | A 12507020-10/2-20 |
| | | 30 | 113 | 83 | | 23994 | 76 | | 770 | 1,96 | A 12507030-10/2-20 |
| | | 40 | 133 | 93 | | 22040 | 70 | | 627 | 2,14 | A 12507040-10/2-20 |
| | | 50 | 153 | 103 | | 20700 | 66 | | 528 | 2,28 | A 12507050-10/2-20 |
| 140 | 70 | 10 | 83 | 73 | 6 | 43645 | 111 | 58875 | 1523 | 1,35 | A 14007010-8/2-25 |
| | | 20 | 103 | 83 | | 36850 | 94 | | 1101 | 1,60 | A 14007020-8/2-25 |
| | | 30 | 123 | 93 | | 33002 | 84 | | 862 | 1,78 | A 14007030-8/2-25 |
| | | 40 | 143 | 103 | | 30525 | 78 | | 709 | 1,93 | A 14007040-8/2-25 |
| | | 50 | 163 | 113 | | 28798 | 73 | | 602 | 2,04 | A 14007050-8/2-25 |
| 150 | 80 | 10 | 83 | 73 | 6 | 53667 | 109 | 73594 | 1993 | 1,37 | A 15008010-10/2-25 |
| | | 20 | 103 | 83 | | 44866 | 91 | | 1436 | 1,64 | A 15008020-10/2-25 |
| | | 30 | 123 | 93 | | 39907 | 81 | | 1123 | 1,84 | A 15008030-10/2-25 |
| | | 40 | 143 | 103 | | 36725 | 75 | | 922 | 2,00 | A 15008040-10/2-25 |
| | | 50 | 163 | 113 | | 34510 | 70 | | 782 | 2,13 | A 15008050-10/2-25 |
| 160 | 90 | 10 | 83 | 73 | 6 | 53667 | 109 | 73594 | 1993 | 1,37 | A 16009010-10/2-25 |
| | | 20 | 103 | 83 | | 44866 | 91 | | 1436 | 1,64 | A 16009020-10/2-25 |
| | | 30 | 123 | 93 | | 39907 | 81 | | 1123 | 1,84 | A 16009030-10/2-25 |
| | | 40 | 143 | 103 | | 36725 | 75 | | 922 | 2,00 | A 16009040-10/2-25 |
| | | 50 | 163 | 113 | | 34510 | 70 | | 782 | 2,13 | A 16009050-10/2-25 |

NSR-FEDER-SCHIENE Baureihe "STANDARD"

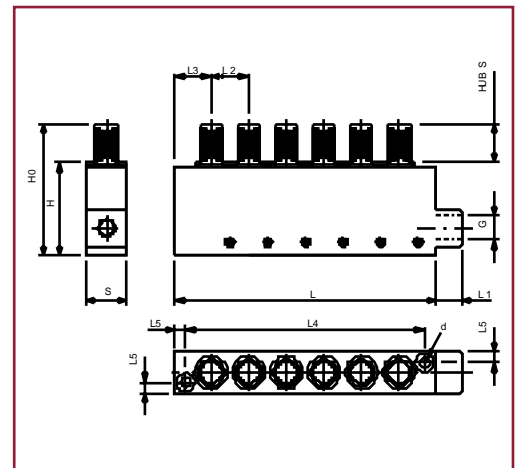
zum externen Befüllen über Schlauchanschluss, Schlauchleitung, Kontrollarmatur u. Ausgleichsbehälter.

- volle Federkraft bei Hubbeginn
- v. vom Anwender einstellbare Kraft
- gleichbleibende Kraft auf die Lebensdauer bezogen
- gebündelte Kraft auf kleinstem Raum
- robuste Ausführung, lange Standzeiten

Nur im eingebauten Zustand mit Gas füllen!
Ausgleichsbehälter auf Anfrage erhältlich!

- (1) max. zul. Betriebsdruck 150 bar!
- (2) andere Gewindeanschlüsse möglich!
- (3) Anzahl der Kolben!

Maßänderungen vorbehalten! Weitere Abmessungen auf Anfrage!



| S | L | Hub | H0 | H | L1 | L2 | L3 | L4 | L5 | d | G (2) | n (3) | F1 (N) 100bar | F2 (N) 150bar (1) | Typ Bestell-Nr. |
|------|-----|-----|----|----|----|----|----|-----|----|-----|-------|-------|---------------|-------------------|------------------|
| 17,5 | 105 | 10 | 58 | 48 | 20 | 20 | 21 | 93 | 6 | 5,5 | 1/8" | 4 | 5307 | 7960 | FS 1710510-4-13 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 1710515-4-13 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 1710520-4-13 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 1710530-4-13 |
| 17,5 | 145 | 10 | 58 | 48 | 20 | 20 | 21 | 133 | 6 | 5,5 | 1/8" | 6 | 7960 | 11940 | FS 1714510-6-13 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 1714515-6-13 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 1714520-6-13 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 1714530-6-13 |
| 17,5 | 185 | 10 | 58 | 48 | 20 | 20 | 21 | 173 | 6 | 5,5 | 1/8" | 8 | 10613 | 15920 | FS 1718510-8-13 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 1718515-8-13 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 1718520-8-13 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 1718530-8-13 |
| 17,5 | 225 | 10 | 58 | 48 | 20 | 20 | 21 | 213 | 6 | 5,5 | 1/8" | 10 | 13266 | 19899 | FS 1722510-10-13 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 1722515-10-13 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 1722520-10-13 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 1722530-10-13 |
| 20,0 | 111 | 10 | 58 | 48 | 20 | 22 | 21 | 99 | 6 | 5,5 | 1/4" | 4 | 6603 | 9904 | FS 2011110-4-14 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 2011115-4-14 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2011120-4-14 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2011130-4-14 |
| 20,0 | 155 | 10 | 58 | 48 | 20 | 22 | 21 | 143 | 6 | 5,5 | 1/4" | 6 | 9904 | 14856 | FS 2015510-6-14 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 2015515-6-14 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2015520-6-14 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2015530-6-14 |
| 20,0 | 199 | 10 | 58 | 48 | 20 | 22 | 21 | 187 | 6 | 5,5 | 1/4" | 8 | 13204 | 19806 | FS 2019910-8-14 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 2019915-8-14 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2019920-8-14 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2019930-8-14 |
| 20,0 | 243 | 10 | 58 | 48 | 20 | 22 | 21 | 231 | 6 | 5,5 | 1/4" | 10 | 16504 | 24756 | FS 2024310-10-14 |
| | | 15 | 68 | 53 | | | | | | | | | | | FS 2024315-10-14 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2024320-10-14 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2024330-10-14 |

NSR-FEDER-SCHIENE Baureihe "STANDARD"

| S | L | Hub | H0 | H | L1 | L2 | L3 | L4 | L5 | d | G (2) | n (3) | F1 (N) 100bar | F2 (N) 150bar (1) | Typ Bestell-Nr. |
|------|-----|-----|-----|-----|----|----|----|-----|----|-----|-------|-------|---------------|-------------------|------------------|
| 22,5 | 117 | 10 | 58 | 48 | 20 | 24 | 21 | 105 | 6 | 5,5 | 1/4" | 4 | 8039 | 12058 | FS 2211710-4-16 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2211720-4-16 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2211730-4-16 |
| | | 40 | 118 | 78 | | | | | | | | | | | FS 2211740-4-16 |
| | | 50 | 138 | 88 | | | | | | | | | | | FS 2211750-4-16 |
| 22,5 | 165 | 10 | 58 | 48 | 20 | 24 | 21 | 105 | 6 | 5,5 | 1/4" | 6 | 12058 | 18086 | FS 2216510-6-16 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2216520-6-16 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2216530-6-16 |
| | | 40 | 118 | 78 | | | | | | | | | | | FS 2216540-6-16 |
| | | 50 | 138 | 88 | | | | | | | | | | | FS 2216550-6-16 |
| 22,5 | 213 | 10 | 58 | 48 | 20 | 24 | 21 | 201 | 6 | 5,5 | 1/4" | 8 | 16077 | 24115 | FS 2221310-8-16 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2221320-8-16 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2221330-8-16 |
| | | 40 | 118 | 78 | | | | | | | | | | | FS 2221340-8-16 |
| | | 50 | 138 | 88 | | | | | | | | | | | FS 2221350-8-16 |
| 22,5 | 261 | 10 | 58 | 48 | 20 | 24 | 21 | 249 | 6 | 5,5 | 1/4" | 10 | 20096 | 30144 | FS 2226110-10-16 |
| | | 20 | 78 | 58 | | | | | | | | | | | FS 2226120-10-16 |
| | | 30 | 98 | 68 | | | | | | | | | | | FS 2226130-10-16 |
| | | 40 | 118 | 78 | | | | | | | | | | | FS 2226140-10-16 |
| | | 50 | 138 | 88 | | | | | | | | | | | FS 2226150-10-16 |
| 25,0 | 129 | 10 | 63 | 53 | 20 | 26 | 24 | 115 | 7 | 6,5 | 1/4" | 4 | 10173 | 15260 | FS 2512910-4-18 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 2512920-4-18 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 2512930-4-18 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 2512940-4-18 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 2512950-4-18 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 2512960-4-18 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 2512970-4-18 |
| 25,0 | 181 | 10 | 63 | 53 | 20 | 26 | 24 | 167 | 7 | 6,5 | 1/4" | 6 | 15260 | 22890 | FS 2518110-6-18 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 2518120-6-18 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 2518130-6-18 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 2518140-6-18 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 2518150-6-18 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 2518160-6-18 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 2518170-6-18 |
| 25,0 | 233 | 10 | 63 | 53 | 20 | 26 | 24 | 219 | 7 | 6,5 | 1/4" | 8 | 20347 | 30521 | FS 2523310-8-18 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 2523320-8-18 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 2523330-8-18 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 2523340-8-18 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 2523350-8-18 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 2523360-8-18 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 2523370-8-18 |

NSR-FEDER-SCHIENE Baureihe "STANDARD"

| S | L | Hub | H0 | H | L1 | L2 | L3 | L4 | L5 | d | G (2) | n (3) | F1 (N) 100bar | F2 (N) 150bar (1) | Typ Bestell-Nr. |
|------|-----|-----|-----|-----|----|----|----|-----|----|-----|-------|-------|---------------|-------------------|------------------|
| 25,0 | 285 | 10 | 63 | 53 | 20 | 26 | 24 | 271 | 7 | 6,5 | 1/4" | 10 | 25434 | 38151 | FS 2528510-10-18 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 2528520-10-18 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 2528530-10-18 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 2528540-10-18 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 2528550-10-18 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 2528560-10-18 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 2528570-10-18 |
| 30,0 | 135 | 10 | 63 | 53 | 20 | 28 | 24 | 121 | 7 | 6,5 | 1/4" | 4 | 12560 | 18840 | FS 3013510-4-20 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 3013520-4-20 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 3013530-4-20 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 3013540-4-20 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 3013550-4-20 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 3013560-4-20 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 3013570-4-20 |
| 30,0 | 191 | 10 | 63 | 53 | 20 | 28 | 24 | 177 | 7 | 6,5 | 1/4" | 6 | 12560 | 28260 | FS 3019110-6-20 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 3019120-6-20 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 3019130-6-20 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 3019140-6-20 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 3019150-6-20 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 3019160-6-20 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 3019170-6-20 |
| 30,0 | 247 | 10 | 63 | 53 | 20 | 28 | 24 | 233 | 7 | 6,5 | 1/4" | 8 | 25120 | 37680 | FS 3024710-8-20 |
| | | 20 | 83 | 63 | | | | | | | | | | | FS 3024720-8-20 |
| | | 30 | 103 | 73 | | | | | | | | | | | FS 3024730-8-20 |
| | | 40 | 123 | 83 | | | | | | | | | | | FS 3024740-8-20 |
| | | 50 | 143 | 93 | | | | | | | | | | | FS 3024750-8-20 |
| | | 60 | 163 | 103 | | | | | | | | | | | FS 3024760-8-20 |
| | | 70 | 183 | 113 | | | | | | | | | | | FS 3024770-8-20 |

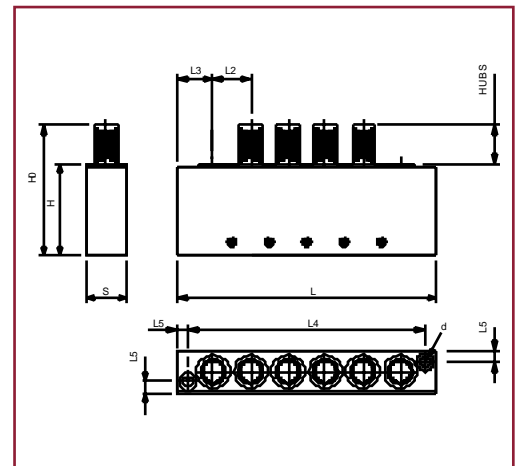
NSR-FEDER-SCHIENE Baureihe "AUTONOM"

als vorgespannte, geschlossene Einheit mit, Füllventil, ohne Schlauchanschluss.

- hohe Federkraft bei Hubbeginn
- gleichbleibende Kraft auf die Lebensdauer bezogen
- gebündelte Kraft auf kleinstem Raum
- robuste Ausführung, lange Standzeiten

- (1) max. zul. Fülldruck!
- (2) Kraft bei max. zul. Betriebsdruck 150 bar!
- (3) Anzahl der Wirk-Kolben!
- (4) Anfangskraft bei Hubbeginn!

Maßänderungen vorbehalten!



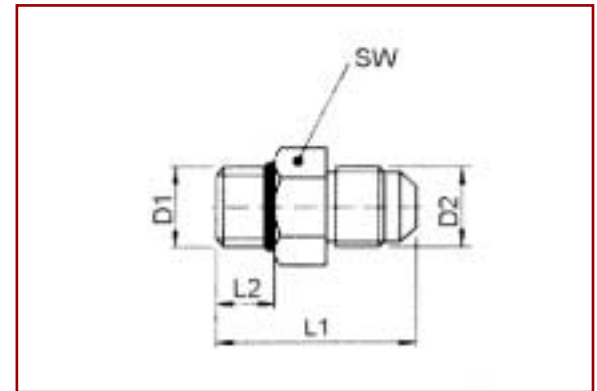
| S | L | Hub | H0 | H | L2 | L3 | L4 | L5 | d | p1 (1) bar | n (3) | F1 (N) (4) | F2 (N) 150bar (2) | I F1/Fmax (3) | Typ Bestell-Nr. |
|------|-----|-----|-----|----|----|----|-----|----|-----|---------------|-------|---------------|-------------------------|---------------------|--------------------|
| 17,5 | 145 | 10 | 68 | 58 | 20 | 21 | 133 | 6 | 5,5 | 110 | 4 | 5845 | 7960 | 1,36 | FA 1714510-4/2-13 |
| | | 15 | 78 | 63 | | | | | | 101 | | 5342 | | 1,49 | FA 1714515-4/2-13 |
| | | 20 | 88 | 68 | | | | | | 94 | | 4989 | | 1,60 | FA 1714520-4/2-13 |
| | | 25 | 98 | 73 | | | | | | 89 | | 4757 | | 1,68 | FA 1714525-4/2-13 |
| | | 30 | 108 | 78 | | | | | | 85 | | 4525 | | 1,76 | FA 1714530-4/2-13 |
| 17,5 | 185 | 10 | 68 | 58 | 20 | 21 | 173 | 6 | 5,5 | 104 | 6 | 8281 | 11940 | 1,44 | FA 1718510-6/2-13 |
| | | 15 | 78 | 63 | | | | | | 93 | | 7437 | | 1,61 | FA 1718515-6/2-13 |
| | | 20 | 88 | 68 | | | | | | 86 | | 6850 | | 1,74 | FA 1718520-6/2-13 |
| | | 25 | 98 | 73 | | | | | | 81 | | 6418 | | 1,86 | FA 1718525-6/2-13 |
| | | 30 | 108 | 78 | | | | | | 77 | | 6087 | | 1,96 | FA 1718530-6/2-13 |
| 17,5 | 225 | 10 | 68 | 58 | 20 | 21 | 213 | 6 | 5,5 | 100 | 8 | 10595 | 15920 | 1,50 | FA 1722510-8/2-13 |
| | | 15 | 78 | 63 | | | | | | 89 | | 9399 | | 1,69 | FA 1722515-8/2-13 |
| | | 20 | 88 | 68 | | | | | | 81 | | 8574 | | 1,86 | FA 1722520-8/2-13 |
| | | 25 | 98 | 73 | | | | | | 75 | | 7971 | | 2,00 | FA 1722525-8/2-13 |
| | | 30 | 108 | 78 | | | | | | 71 | | 7510 | | 2,12 | FA 1722530-8/2-13 |
| 20,0 | 155 | 10 | 68 | 58 | 22 | 21 | 143 | 6 | 5,5 | 112 | 4 | 7387 | 9903 | 1,34 | FA 2015510-4/2-14 |
| | | 15 | 78 | 63 | | | | | | 103 | | 6781 | | 1,46 | FA 2015515-4/2-14 |
| | | 20 | 88 | 68 | | | | | | 96 | | 6354 | | 1,56 | FA 2015520-4/2-14 |
| | | 25 | 98 | 73 | | | | | | 91 | | 6036 | | 1,64 | FA 2015525-4/2-14 |
| | | 30 | 108 | 78 | | | | | | 88 | | 5791 | | 1,71 | FA 2015530-4/2-14 |
| 20,0 | 199 | 10 | 68 | 58 | 22 | 21 | 187 | 6 | 5,5 | 106 | 6 | 10500 | 14854 | 1,42 | FA 2019910-6/2-14 |
| | | 15 | 78 | 63 | | | | | | 96 | | 9486 | | 1,57 | FA 2019915-6/2-14 |
| | | 20 | 88 | 68 | | | | | | 89 | | 8777 | | 1,69 | FA 2019920-6/2-14 |
| | | 25 | 98 | 73 | | | | | | 83 | | 8255 | | 1,80 | FA 2019925-6/2-14 |
| | | 30 | 108 | 78 | | | | | | 79 | | 7854 | | 1,89 | FA 2019930-6/2-14 |
| 20,0 | 243 | 10 | 68 | 58 | 22 | 21 | 231 | 6 | 5,5 | 103 | 8 | 13554 | 19806 | 1,46 | FA 2024310-8/2-14 |
| | | 15 | 78 | 63 | | | | | | 92 | | 12119 | | 1,63 | FA 2024315-8/2-14 |
| | | 20 | 88 | 68 | | | | | | 84 | | 11122 | | 1,78 | FA 2024320-8/2-14 |
| | | 25 | 98 | 73 | | | | | | 79 | | 10390 | | 1,91 | FA 2024325-8/2-14 |
| | | 30 | 108 | 78 | | | | | | 74 | | 9829 | | 2,02 | FA 2024330-8/2-14 |
| 22,0 | 165 | 10 | 68 | 58 | 24 | 21 | 153 | 6 | 5,5 | 113 | 4 | 9095 | 12058 | 1,33 | FA 2216510-4/2-16 |
| | | 15 | 78 | 63 | | | | | | 104 | | 8379 | | 1,44 | FA 2216515-4/2-16 |
| | | 20 | 88 | 68 | | | | | | 98 | | 7872 | | 1,53 | FA 2216520-4/2-16 |
| | | 25 | 98 | 73 | | | | | | 93 | | 7496 | | 1,61 | FA 2216525-4/2-16 |
| | | 30 | 108 | 78 | | | | | | 90 | | 7204 | | 1,67 | FA 2216550-4/2-16 |

NSR-FEDER-SCHIENE Baureihe "AUTONOM"

| S | L | Hub | H0 | H | L2 | L3 | L4 | L5 | d | p1 (1) bar | n (3) | F1 (N) (4) | F2 (N) 150bar (2) | I F1/Fmax (3) | Typ Bestell-Nr. | |
|------|-----|-----|-----|----|----|----|-----|----|-----|------------------|-------|---------------|-------------------------|---------------------|--------------------|-------------------|
| 22,0 | 213 | 10 | 68 | 58 | 24 | 21 | 201 | 6 | 5,5 | 104 | 6 | 8281 | 11940 | 1,44 | FA 2221310-6/2-16 | |
| | | 15 | 78 | 63 | | | | | | 93 | | 7437 | | 1,61 | FA 2221315-6/2-16 | |
| | | 20 | 88 | 68 | | | | | | | 86 | | 6850 | | 1,74 | FA 2221320-6/2-16 |
| | | 25 | 98 | 73 | | | | | | | 81 | | 6418 | | 1,86 | FA 2221325-6/2-16 |
| | | 30 | 108 | 78 | | | | | | | 77 | | 6087 | | 1,96 | FA 2221330-6/2-16 |
| 22,0 | 261 | 10 | 68 | 58 | 24 | 21 | 249 | 6 | 5,5 | 105 | 8 | 16935 | 24115 | 1,42 | FA 2226110-8/2-16 | |
| | | 15 | 78 | 63 | | | | | | 95 | | 15248 | | 1,58 | FA 2226115-8/2-16 | |
| | | 20 | 88 | 68 | | | | | | 88 | | 14067 | | 1,71 | FA 2226120-8/2-16 | |
| | | 25 | 98 | 73 | | | | | | 82 | | 13195 | | 1,83 | FA 2226125-8/2-16 | |
| | | 30 | 108 | 78 | | | | | | 78 | | 12524 | | 1,93 | FA 2226130-8/2-16 | |
| 25,0 | 181 | 10 | 73 | 63 | 26 | 24 | 167 | 7 | 6,5 | 115 | 4 | 11673 | 15260 | 1,31 | FA 2518110-4/2-18 | |
| | | 15 | 83 | 68 | | | | | | 106 | | 10774 | | 1,42 | FA 2518115-4/2-18 | |
| | | 20 | 93 | 73 | | | | | | 100 | | 10132 | | 1,51 | FA 2518120-4/2-18 | |
| | | 25 | 103 | 78 | | | | | | 95 | | 9650 | | 1,58 | FA 2518125-4/2-18 | |
| | | 30 | 113 | 83 | | | | | | 91 | | 9275 | | 1,65 | FA 2518130-4/2-18 | |
| 25,0 | 233 | 10 | 73 | 63 | 26 | 24 | 219 | 7 | 6,5 | 110 | 6 | 16724 | 22891 | 1,37 | FA 2523310-6/2-18 | |
| | | 15 | 83 | 68 | | | | | | 100 | | 15222 | | 1,50 | FA 2523315-6/2-18 | |
| | | 20 | 93 | 73 | | | | | | 93 | | 14159 | | 1,62 | FA 2523320-6/2-18 | |
| | | 25 | 103 | 78 | | | | | | 88 | | 13366 | | 1,71 | FA 2523325-6/2-18 | |
| | | 30 | 113 | 83 | | | | | | 84 | | 12753 | | 1,80 | FA 2523330-6/2-18 | |
| 25,0 | 285 | 10 | 73 | 63 | 26 | 24 | 271 | 7 | 6,5 | 107 | 8 | 21684 | 30521 | 1,41 | FA 2528510-8/2-18 | |
| | | 15 | 83 | 68 | | | | | | 89 | | 18067 | | 1,69 | FA 2528515-8/2-18 | |
| | | 20 | 93 | 73 | | | | | | 79 | | 16099 | | 1,90 | FA 2528520-8/2-18 | |
| | | 25 | 103 | 78 | | | | | | 73 | | 14862 | | 2,05 | FA 2528525-8/2-18 | |
| | | 30 | 113 | 83 | | | | | | 69 | | 14012 | | 2,18 | FA 2528530-8/2-18 | |
| 30,0 | 191 | 10 | 63 | 53 | 28 | 24 | 177 | 7 | 6,5 | 118 | 4 | 14869 | 18840 | 1,27 | FA 3019110-4/2-20 | |
| | | 20 | 83 | 63 | | | | | | 104 | | 12996 | | 1,45 | FA 3019120-4/2-20 | |
| | | 30 | 103 | 73 | | | | | | 95 | | 11905 | | 1,58 | FA 3019130-4/2-20 | |
| | | 40 | 123 | 83 | | | | | | 89 | | 11191 | | 1,68 | FA 3019140-4/2-20 | |
| | | 50 | 143 | 93 | | | | | | 85 | | 10688 | | 1,76 | FA 3019150-4/2-20 | |
| 30,0 | 247 | 10 | 63 | 53 | 28 | 24 | 233 | 7 | 6,5 | 110 | 6 | 20671 | 28260 | 1,37 | FA 3024710-6/2-20 | |
| | | 20 | 83 | 63 | | | | | | 93 | | 17514 | | 1,61 | FA 3024720-6/2-20 | |
| | | 30 | 103 | 73 | | | | | | 84 | | 15784 | | 1,79 | FA 3024730-6/2-20 | |
| | | 40 | 123 | 83 | | | | | | 78 | | 14692 | | 1,92 | FA 3024740-6/2-20 | |
| | | 50 | 143 | 93 | | | | | | 74 | | 13940 | | 2,03 | FA 3024750-6/2-20 | |
| 30,0 | 303 | 10 | 63 | 53 | 28 | 24 | 289 | 7 | 6,5 | 112 | 8 | 28098 | 37680 | 1,34 | FA 3030310-8/2-20 | |
| | | 20 | 83 | 63 | | | | | | 94 | | 23685 | | 1,59 | FA 3030320-8/2-20 | |
| | | 30 | 103 | 73 | | | | | | 84 | | 21148 | | 1,78 | FA 3030330-8/2-20 | |
| | | 40 | 123 | 83 | | | | | | 78 | | 19499 | | 1,93 | FA 3030340-8/2-20 | |
| | | 50 | 143 | 93 | | | | | | 73 | | 18342 | | 2,05 | FA 3030350-8/2-20 | |

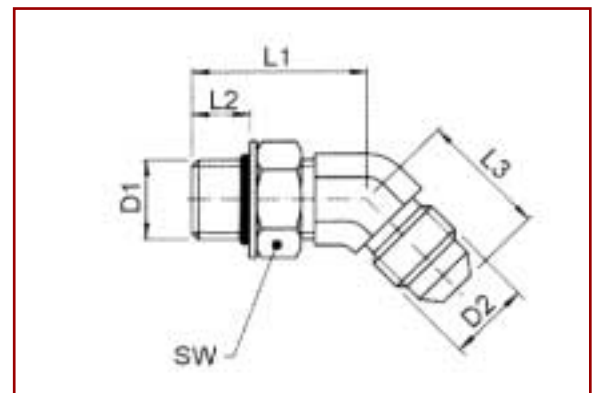
Gerade Einschraubverschraubung TYP GEV...

| BESTELL-NR | D1 Gewinde | D2 Gewinde | SW mm | L1 mm | L2 mm |
|---------------|---------------|---------------|----------|----------|----------|
| GEV-18-1220 | G1/8" | 7/16"-20 | 14 | 30,0 | 8,0 |
| GEV-14-1220 | G1/4" | 1/2"-20 | 19 | 37,8 | 12,0 |
| GEV-38-3416 | G3/8" | 1/2"-16 | 22 | 38,5 | 12,0 |
| GEV-716-1220 | 7/16"-20 | 7/16"-20 | 14 | 31,2 | 9,2 |
| GEV-1220-1220 | 1/2"-20 | 1/2"-20 | 16 | 31,2 | 9,2 |



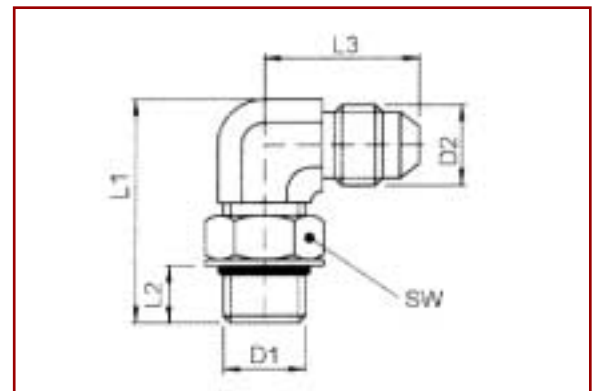
Winkel-Einschraubverschraubung 45° Typ WEV-45

| BESTELL-NR | D1 Gewinde | D2 Gewinde | SW mm | L1 mm | L2 mm | L3 mm |
|------------------|---------------|---------------|----------|----------|----------|----------|
| WEV-45-18-1220 | G1/8" | 7/16"-20 | 14 | 26,7 | 8,0 | 18,3 |
| WEV-45-14-1220 | G1/4" | 1/2"-20 | 19 | 29,0 | 12,0 | 20,8 |
| WEV-45-38-3416 | G3/8" | 1/2"-16 | 22 | 33,0 | 12,0 | 24,9 |
| WEV-45-716-1220 | 7/16"-20 | 7/16"-20 | 14 | 26,7 | 9,2 | 18,3 |
| WEV-45-1220-1220 | 1/2"-20 | 1/2"-20 | 17 | 26,7 | 9,2 | 19,6 |



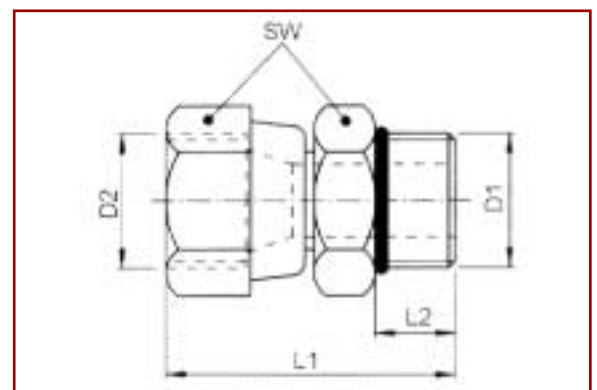
Winkel-Einschraubverschraubung 90° Typ WEV-90

| BESTELL-NR | D1 Gewinde | D2 Gewinde | SW mm | L1 mm | L2 mm | L3 mm |
|------------------|---------------|---------------|----------|----------|----------|----------|
| WEV-90-18-1220 | G1/8" | 7/16"-20 | 14 | 26,2 | 8,0 | 22,6 |
| WEV-90-14-1220 | G1/4" | 1/2"-20 | 19 | 31,8 | 12,0 | 26,6 |
| WEV-90-38-3416 | G3/8" | 1/2"-16 | 22 | 36,8 | 12,0 | 31,8 |
| WEV-90-716-1220 | 7/16"-20 | 7/16"-20 | 14 | 26,2 | 9,2 | 22,6 |
| WEV-90-1220-1220 | 1/2"-20 | 1/2"-20 | 16 | 27,7 | 9,2 | 24,1 |



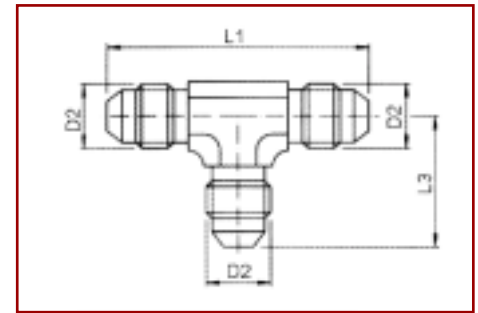
Gerade Einschraubverschraubung TYP GEA-E..

| BESTELL-NR | D1 Gewinde | D2 Gewinde | SW mm | L1 mm | L2 mm |
|------------------|---------------|---------------|----------|----------|----------|
| GEA-E-18-1220 | G1/8" | 7/16"-20 | 14 | 30,0 | 8,0 |
| GEA-E -14-1220 | G1/4" | 1/2"-20 | 19 | 37,8 | 12,0 |
| GEA-E -38-3416 | G3/8" | 1/2"-16 | 22 | 38,5 | 12,0 |
| GEA-E -716-1220 | 7/16"-20 | 7/16"-20 | 14 | 31,2 | 9,2 |
| GEA-E -1220-1220 | 1/2"-20 | 1/2"-20 | 16 | 31,2 | 9,2 |



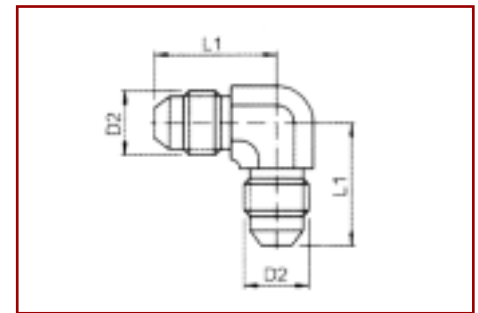
T-Verschraubung Typ TV-...

| BESTELL-NR | D2 Gewinde | L1 mm | L2 mm |
|------------|---------------|----------|----------|
| TV-18-1220 | 7/16"-20 | 45,2 | 22,6 |
| TV-14-1220 | 1/2"-20 | 48,2 | 24,1 |
| TV-38-3416 | 1/2"-16 | 63,6 | 31,8 |



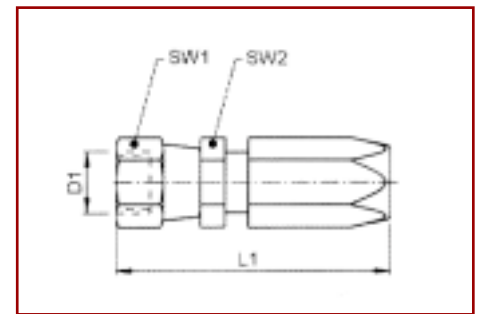
Winkel-Verschraubung 90° TYP WV-90...

| BESTELL-NR | D2 Gewinde | L2 mm |
|------------|---------------|----------|
| WV-90-716 | 7/16"-20 | 22,6 |
| WV-90-1220 | 1/2"-20 | 24,1 |
| WV-90-3416 | 1/2"-16 | 31,8 |



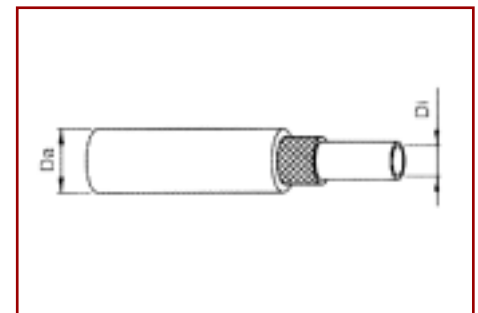
Schlauchverschraubung-Schraubarmatur Typ SVSA-G...

| BESTELL-NR | D1 Schlauch | D2 Gewinde | SW1 mm | SW1 mm | L1 mm |
|-------------|----------------|---------------|-----------|-----------|----------|
| SVSA-G-716 | 4,8 | 7/16"-20 | 14 | 16 | 54,0 |
| SVSA-G-1220 | 6,3 | 1/2"-20 | 16 | 16 | 56,5 |
| SVSA-G-3416 | 9,5 | 1/2"-16 | 22 | 19 | 73,0 |



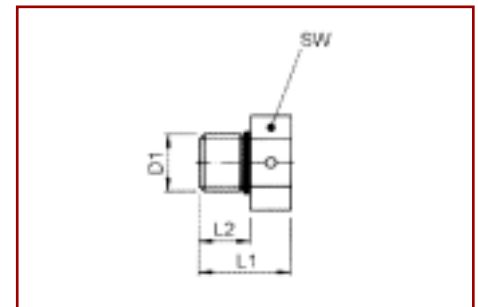
Hochdruckschlauch Typ HDSL-P...

| BESTELL-NR | Di mm innen | Da mm aussen | Betriebs- druck max. | Berst- druck min. |
|----------------|----------------|-----------------|-------------------------|----------------------|
| HDSL-P-48-716 | 4,8 | 10,9 | 210 bar | 840 bar |
| HDSL-P-63-1220 | 6,3 | 11,9 | 190 bar | 760 bar |
| HDSL-P-95-3416 | 9,5 | 16,0 | 155 bar | 630 bar |



Berstscheibe TYP HDB...

| BESTELL-NR | D1 | L1 mm | L2 mm | SW mm |
|---------------|-------|----------|----------|----------|
| HDB-N-1/4-150 | G1/4" | 18 | 10 | 17 |
| HDB-N-1/4-250 | G1/4" | 18 | 10 | 17 |



Die Kontrollarmaturen werden bei den NSP-FEDER-PAKETEN Typ "STANDARD" und bei den NSR-FEDER-SCHIENEN Typ "STANDARD" verwendet.

Sie dienen zum Ablesen und Einstellen des Druckes, zum Laden des Stickstoffes und zur Druckentlastung des Systems.

Die Kontrollarmatur KA-250-N/ZA ist zusätzlich mit einem internen Speichertank ausgestattet. Dies ermöglicht den Anschluss einzelner, kleinerer Federn vom Typ "STANDARD" ohne zusätzlichen externen Speichertank.

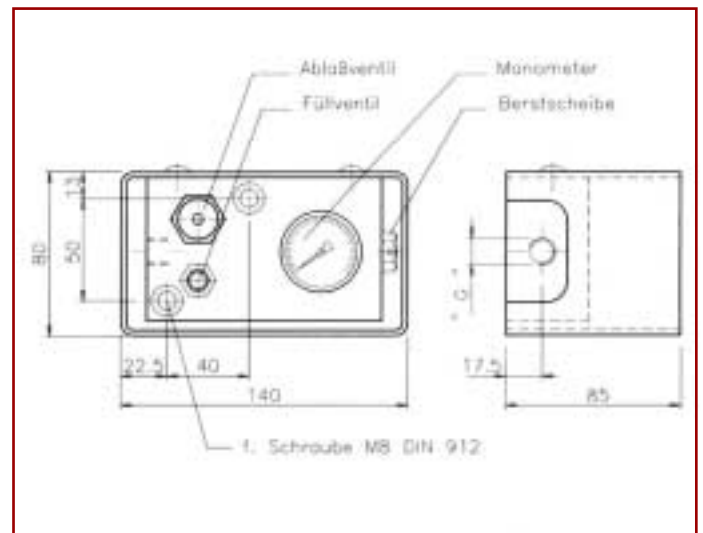


Kontrollarmatur

KA-150-N

Max. zul. Betriebsdruck 150 bar!
Berstscheibensicherung 180 bar!

| G | Best.-Nr. |
|-------------|------------------|
| G 1/4" | KA-150-N-G1/4" |
| G 3/8" | KA-150-N-G3/8" |
| 1/2"-20 UNF | KA-150-N-1/2"-20 |



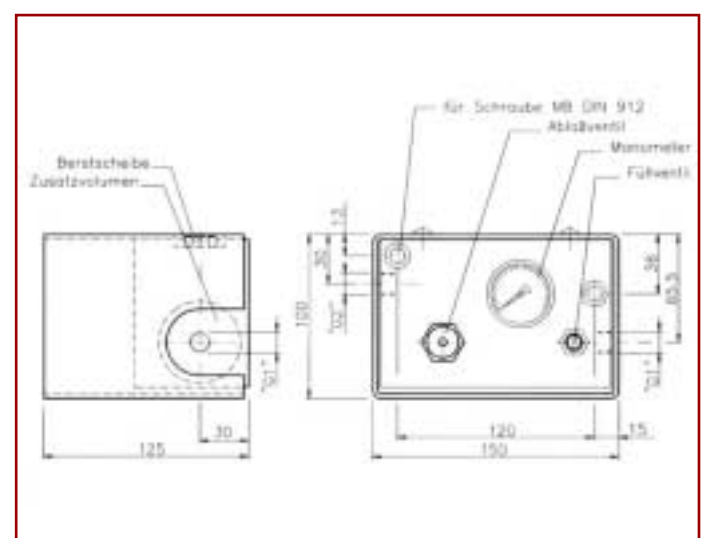
Kontrollarmatur

KA-250-N/ZA

Mit Zusatzvolumen
V=0,125l

Max. zul. Betriebsdruck 150 bar!
Berstscheibensicherung 180 bar!

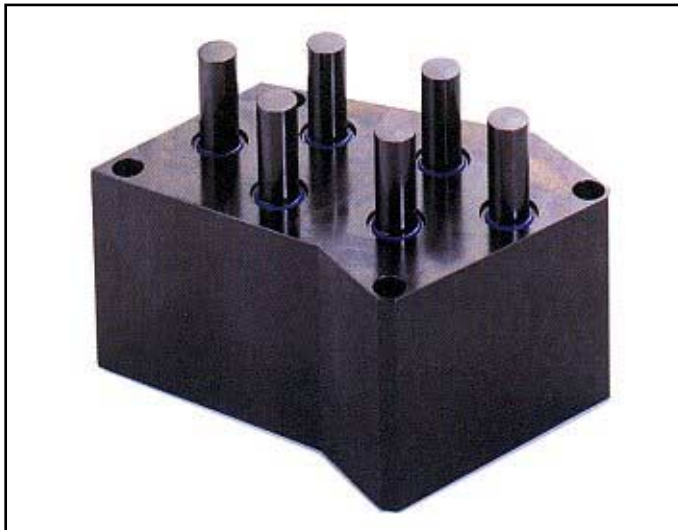
| G1/G2 | Best.-Nr. |
|---------------|---------------------|
| G 1/4" | KA-250-N/ZA-G1/4" |
| G 3/8"/G 1/4" | KA-250-N/ZA-G3/8" |
| 1/2"-20 UNF | KA-250-N/ZA-1/2"-20 |





■ Beispiel 1

| | |
|-----------------|-----------|
| Länge: | 307 mm |
| Breite: | 173 mm |
| Blockhöhe: | 108 mm |
| Hubw eg: | 25 mm |
| Fülldruck: | 150 bar |
| Kraft (Anfang): | 117,80 kn |
| Kraft (Ende): | 142,10 kn |



■ Beispiel 2

| | |
|-----------------|----------|
| Länge: | 190 mm |
| Breite: | 140 mm |
| Blockhöhe: | 106 mm |
| Hubw eg: | 50 mm |
| Fülldruck: | 150 bar |
| Kraft (Anfang): | 44,30 kn |
| Kraft (Ende): | 56,00 kn |



■ Beispiel 3

| | |
|-----------------|-----------|
| Länge: | 480 mm |
| Breite: | 165 mm |
| Blockhöhe: | 108 mm |
| Hubw eg: | 50 mm |
| Fülldruck: | 150 bar |
| Kraft (Anfang): | 220,90 kn |
| Kraft (Ende): | 301,70 kn |