

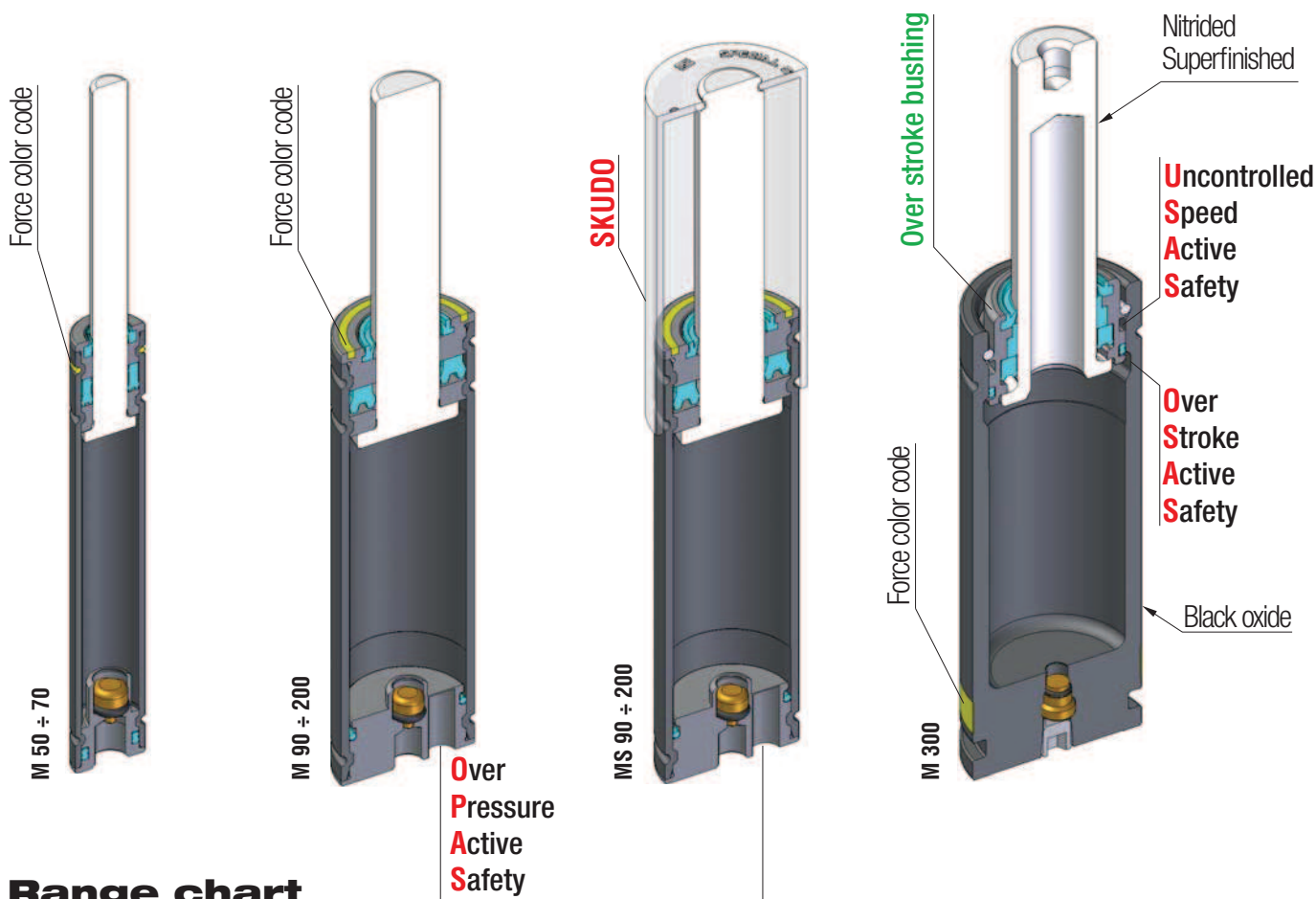
M SERIES MS M SERIES + SKUDO



PED
97/23/EC



| | | |
|-----|-----|------|
| VDI | BMW | Ford |
| MB | PSA | VW |



Range chart

| Model | Body Ø | | Stroke Cu | | Initial force Fo | | OSAS | USAS | OPAS | SKUDO |
|----------|------------|------------|-----------|-------------|------------------|-----------|------|------|------|-------|
| | mm | inch | mm | inch | daN | lb | | | | |
| M 50 | 12 | 0,47 | 7 - 125 | 0,28 - 4,92 | 6 - 50 | 13 - 112 | - | - | - | - |
| M 70 | 15 | 0,59 | 7 - 125 | 0,28 - 4,92 | 8 - 70 | 18 - 157 | - | - | - | - |
| M 90 | 19 | 0,75 | 7 - 125 | 0,28 - 4,92 | 5 - 90 | 11 - 202 | - | - | ✓ | - |
| MS 90 | 19 | 0,75 | 7 - 122 | 0,28 - 4,80 | 5 - 90 | 11 - 202 | - | - | ✓ | ✓ |
| M 90 TBM | M 24 X 1,5 | M 24 X 1,5 | 7 - 125 | 0,28 - 4,92 | 5 - 90 | 11 - 202 | - | - | ✓ | - |
| M 90 TEM | M 24 X 1,5 | M 24 X 1,5 | 7 - 125 | 0,28 - 4,92 | 5 - 90 | 11 - 202 | - | - | ✓ | - |
| M 90 TBI | 1"-8 THD | 1"-8 THD | 7 - 125 | 0,28 - 4,92 | 5 - 90 | 11 - 202 | - | - | ✓ | - |
| M 200 | 25 | 0,98 | 7 - 125 | 0,28 - 4,92 | 17 - 200 | 38 - 450 | - | - | ✓ | - |
| MS 200 | 25 | 0,98 | 7 - 122 | 0,28 - 4,80 | 17 - 200 | 38 - 450 | - | - | ✓ | ✓ |
| M 300 | 32 | 1,26 | 7 - 125 | 0,28 - 4,92 | 80 - 320 | 180 - 719 | ✓ | ✓ | - | - |



How to Order

M 90-050-A - RD

Codice cilindro autonomo
Self-contained cylinder code
Kode des eingeständigen Gdf.
Code du cylindre autonome
Codigo del cilindro autónomo
Codigo do cilindro autónomo

Identificazione delle forze iniziali (vedi tab. "force color code"), se non specificata, si intende sempre forza massima YW. Per forze diverse BK + Fo richiasta.

Identification of initial forces (see "force color code" chart), if not specified, it is always intended as maximum force YW. For different forces BK + Fo required

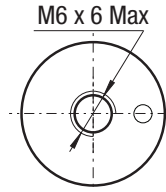
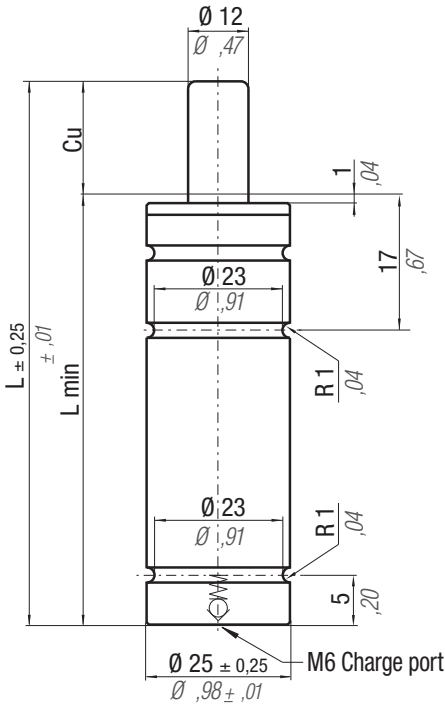
Identifikation der initiales Kräfte (siehe tabelle "force color code"), wenn nicht aufgestellt, es ist immer verstanden als maximaler kraft YW. Für verschiedenen Kräfte, BK + Fo gebrauchte Identifies forces initiale (voir tabelle "force color code"), si non specificé, on entend toujours force maximum YW. Pour forces différentes BK + Fo requise

Identificación de las fuerzas iniciales (veer cuadro "force color code"), si no se especifica, se entiende siempre la maxima fuerza YW. Para fuerzas diferentes BK + Fo requerida

Identificação das forças iniciais (ver Tabela "force color code"), se não especificado, é sempre entendido a maxima força YW. Para forças diferentes BK + Fo inquirita

M 200

| | | | |
|-------------------------------------|------------------------------------|---------------|--------------------------|
| ISO 11901 - 1 E24.54.815.G (PSA) | VDI 3003 - Blatt 2 39D 878 (VW) | B2 4007 (BMW) | B8 3180 220 000 002 (MB) |
|-------------------------------------|------------------------------------|---------------|--------------------------|



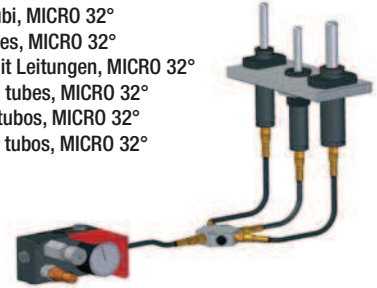
| Force color code | P | | F ₀ Initial force ± 5% +20°C +68°F | |
|------------------|--------|----------|--|--------|
| | bar | psi | daN | lb |
| OR | 15 | 218 | 17 | 38 |
| PR | 25 | 363 | 28 | 63 |
| GR | 45 | 653 | 50 | 112 |
| BU | 90 | 1305 | 100 | 225 |
| RD | 135 | 1958 | 150 | 337 |
| YW | 180 | 2610 | 200 | 450 |
| BK | 10-180 | 145-2610 | 11-200 | 25-450 |

Info

* F_{1i} = Isothermal end force at 100% Cu - see page 31

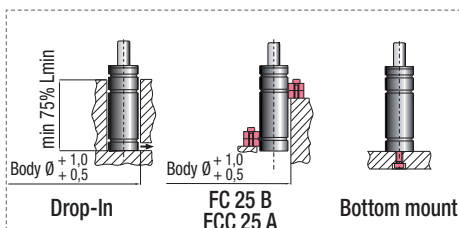
** F_{1p} = Polytrophic end force at 100% Cu - see page 31

Collegabile con tubi, MICRO 32°
Linkable with hoses, MICRO 32°
Anschlussfähig mit Leitungen, MICRO 32°
Connectable avec tubes, MICRO 32°
Connectable con tubos, MICRO 32°
Acompláveis com tubos, MICRO 32°



| | | | | | | | | | |
|--|----------------------|--------------------|-------------------|------------------------------|----------------------------|--|-------------------------------|----------------------|-------------------------------|
| | °F 32 - 176 | °C 0 - 80 | ΔP ± 0,33 %/°C | P max 180 bar 2610 psi | P min 10 bar 145 psi | S 1,13 cm ² 0,175 in ² | SPM ~ 50 - 80 (at 20°C) | Max Speed 1,8 m/s | Maintenance kit Disposable |
|--|----------------------|--------------------|-------------------|------------------------------|----------------------------|--|-------------------------------|----------------------|-------------------------------|

| CODE | Cu | | L | | L min | | F _{1i} End force * | | F _{1p} End force ** | | V ₀ | | CE | | |
|----------------------|------|------|-------|-------|-------|------|--------------------------------|----|---------------------------------|----|-----------------|-----------------|------|------|------|
| | mm | inch | mm | inch | mm | inch | daN | lb | daN | lb | cm ³ | in ³ | ~Kg | ~lb | Cat. |
| M200 - 007 - A - ... | 7 | 0,28 | 56 | 2,20 | 49 | 1,93 | 1,16 x F ₀ | | 1,33 x F ₀ | | - | - | 0,12 | 0,26 | - |
| M200 - 010 - A - ... | 10 | 0,39 | 62 | 2,44 | 52 | 2,05 | 1,20 x F ₀ | | 1,40 x F ₀ | | - | - | 0,13 | 0,29 | - |
| M200 - 013 - A - ... | 12,7 | 0,50 | 67,4 | 2,65 | 54,7 | 2,15 | 1,23 x F ₀ | | 1,46 x F ₀ | | - | - | 0,13 | 0,29 | - |
| M200 - 015 - A - ... | 15 | 0,59 | 72 | 2,83 | 57 | 2,24 | 1,24 x F ₀ | | 1,48 x F ₀ | | - | - | 0,14 | 0,31 | - |
| M200 - 025 - A - ... | 25 | 0,98 | 92 | 3,62 | 67 | 2,64 | 1,29 x F ₀ | | 1,58 x F ₀ | | - | - | 0,16 | 0,35 | - |
| M200 - 038 - A - ... | 38,1 | 1,50 | 118,2 | 4,65 | 80,1 | 3,15 | 1,33 x F ₀ | | 1,65 x F ₀ | | - | - | 0,19 | 0,42 | - |
| M200 - 050 - A - ... | 50 | 1,97 | 142 | 5,59 | 92 | 3,62 | 1,35 x F ₀ | | 1,69 x F ₀ | | - | - | 0,20 | 0,44 | - |
| M200 - 063 - A - ... | 63,5 | 2,50 | 172 | 6,77 | 108,5 | 4,27 | 1,34 x F ₀ | | 1,67 x F ₀ | | - | - | 0,23 | 0,51 | - |
| M200 - 080 - A - ... | 80 | 3,15 | 205 | 8,07 | 125 | 4,92 | 1,36 x F ₀ | | 1,71 x F ₀ | | - | - | 0,26 | 0,57 | - |
| M200 - 100 - A - ... | 100 | 3,94 | 245 | 9,65 | 145 | 5,71 | 1,37 x F ₀ | | 1,73 x F ₀ | | - | - | 0,30 | 0,66 | - |
| M200 - 125 - A - ... | 125 | 4,92 | 295 | 11,61 | 170 | 6,69 | 1,38 x F ₀ | | 1,75 x F ₀ | | - | - | 0,34 | 0,75 | - |



HOW TO ORDER

(10 pcs) M200-050-A-YW